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ABSTRACT

A follow-up publication prompted by the success of an earlier bibliography, the document presents abstracts of publications which focus on finding new directions for implementing career practices in the classroom. The theme of both volumes is implementation; the first chapter of this volume, the only one without annotations, is a compilation of selected references on the foundations of career education, theory and rationale. Chapter 2 deals with theoretical considerations, applications, and surveys of computer-based guidance systems, few in the implementation phase and several curtailed by reduced funding. Chapter 3 provides operational guidelines developed in workshops, institutes, and conferences, and Chapter 4 offers the research related to measurement of vocational behavior which has immediate relevance for practice and reflects new trends. Descriptions of games and simulations form Chapter 5, and Chapter 6 synthesizes the many State and Federally funded career educational projects initiated since Volume 1 was compiled; research and development, exemplary programs and projects, and career education model development are described. Chapter 7 presents locally developed programs. An author index enhances the utility of the publication. (AJ)

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Facilitating Career Development:

An Annotated Bibliography, II

State of Illinois
BOARD OF VOCATIONAL EDUCATION AND REHABILITATION
DIVISION OF VOCATIONAL AND TECHNICAL EDUCATION
MICHAEL J. BAKALIS, Executive Officer
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FINAL REPORT

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FACILITATING CAREER DEVELOPMENT: AN ANNOTATED BIBLIOGRAPHY, II

Conducted Under
Part C of Public Law 90-576

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and Sharon Fischmar, Editors

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INTRODUCTION

In the summer of 1970, the Senior Editor completed a publication entitled Facilitating Career Development: An Annotated Bibliography (ED 042 217) under a grant with the Illinois Division of Vocational and Technical Education. The widespread acceptance and demand for that volume prompted the need for a follow-up publication. A second grant was subsequently awarded in June 1973, the results of which are contained herein.

The format for Volume II is essentially the same as the first. Four chapters (II, III, IV & V) retain the same topical themes. Two others (VI & VII), have been broadened somewhat to reflect recent research and development thrusts. A new chapter (I) has been added to encompass the substantive body of literature related to career education theory and rationale. Also new to this volume is an author index which should considerably enhance the utility of the publication.

The primary reference sources for this publication were Research in Education and Education Index, April 1970 to July 1973. The methodology for the study consisted of identifying, procuring and abstracting publications characterized by the following descriptors: career choice, career development, and career planning; developmental tasks; guidance programs; occupation, choice of; occupational guidance, occupational information, occupational interests, and occupational tests; vocational counseling, vocational development, vocational guidance, vocational interests, vocational tests and vocational psychology. The Editors then selected from these lists of references, the publications which could be subsumed under the previously designated chapter headings. Many references are concerned with several dimensions of career development, but in general, the documents contained within a chapter are quite homogeneous.

An abstract was written in sufficient detail to assist the reader who may be looking for ideas, information and materials related to various needs. The abstracts are of two types: informative and indicative. An informative abstract is written as if the abstractor were the author presenting an objective summary of his own ideas. The abstract contains a statement of the author's thesis, several sentences of his development of proof and his conclusions. In contrast, an indicative abstract is written from the point of view of an informed, but impartial reader, and describes the content and format of a document, in what manner the information is presented, and, if necessary, to whom the

document is addressed. The type of abstract selected to tell the story of a document depended upon the structure of the document and the author's organization of his information. In either case, the minimum requirement for every abstract was a statement of the subject and scope of the document.

This publication has sought to document the fact that a substantial body of data is available for educators who are seeking direction in the implementation of career development programs. The purpose has been to compile an implementation-oriented resource to be used by all manner of educational personnel. It is the Editors' hope that all who read and use this resource will increase the sophistication and scope of career education and guidance activities in the interest of ultimately assisting all students at every educational level with their career planning and decision-making.

L.J.B.

Chapter I

CAREER EDUCATION: THEORY AND RATIONALE

The purpose of the first volume of this bibliography, and the continuing theme, is to present an implementation-oriented resource to be used by all manner of educators in facilitating the career development process. Since publication of the first bibliography, however, career education has emerged as a major, National priority. In recognition of this fact, the Editors would be remiss in not including the substantive body of literature which supports the career education concept. Following, then, is a compilation of selected references, sans annotations, on the foundations of career development and career education.

A. Books, Monographs, and Technical Papers and Reports

American Vocational Association. Career education: Is it a fad or a major development? In Microfiche collection of clearinghouse documents reported in abstracts of research materials in vocational and technical education (ARM), volume 5, number 4. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 068 733)
EDRS Price MF-$23.76

Bailey, L.J. and Stadt, R.W. Career education: New approaches to human development. Bloomington, Illinois: McKnight, 1973.

Borow, H. (ed.) Career guidance for a new age. Boston: Houghton Mifflin, 1973.

Bottoms, G. Career development education K through post-secondary and adult education. Atlanta, Georgia: Georgia State Department of Education, Division of Vocational Education, n.d. (ED 062 580)
EDRS Price MF-$0.65 HC-$3.29

Bottoms, G. Orientation to new concepts and programs of career orientation and occupational education for students in rural areas. Raleigh, North Carolina: Center for Occupational Education, North Carolina State University, 1970. (ED 057 966)

Bottoms, G. and Matheny, K.B. A guide for the development, implementation, and administration of exemplary programs and projects. Atlanta, Georgia: Georgia State Department of Education, Division of Vocational Education, 1969. (ED 040 301)
EDRS Price MF-$0.25 HC-$2.20

Bottoms, G. and Matheny, K.B. Occupational guidance, counseling, and job placement for junior high and secondary school youth. In Microfiche collection of clearinghouse documents reported in abstracts of instructional materials in vocational and technical education (AIM), Fall 1970. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1970. (ED 045 856)
EDRS Price MF-$47.75

Boyer, E.L.; Cosand, J.P.; Gysbers, N.C.; Kerr, C.; Venn, G. and Others. Emerging students--and the new career thrust in higher education. Iowa City, Iowa: American College Testing Program, 1972. (ED 065 056)
EDRS Price MF-$0.65 HC-$3.29

Brown, D. and Others. A career development guide for West Virginia teachers; grades K-12. Morgantown, West Virginia: West Virginia University, Department of Counseling and Guidance, n.d. (ED 065 722)
EDRS Price MF-$0.65 HC-$6.58

Budke, W.E. and Others. Career education practice. Final report. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 073 226)
EDRS Price MF-$0.65 HC-$3.29

Budke, W.E. Review and synthesis of information on occupational exploration. ERIC Clearinghouse on Vocational and Technical Education, 1971. (VT 012 730)

Burchill, G.W. Work experience educational programs for secondary youth. In Microfiche collection of clearinghouse documents reported in abstracts of instructional materials in vocational and technical education (AIM), Fall 1970. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1970. (ED 045 856)
EDRS Price MF-$47.75

Campbell, P.E. and Vetter, L. Career guidance: An overview of alternative approaches. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1971. (ED 057 183)
EDRS Price MF-$0.65 HC-$3.29

Campbell, R.E. and Others. The systems approach: An emerging behavioral model for vocational guidance. A summary report. Research and development series no. 45, 1971. (ED 047 127)
EDRS Price MF-$0.65 HC-$3.29

Campbell, R.E. and Others. Vocational development of disadvantaged junior high school students. Final report. Research Series No. 41. Columbus, Ohio: Ohio State University, 1969. (ED 032 427)
EDRS Price MF-$0.50 HC-$4.65

CAPES: A guideline for career awareness programs for the elementary school. Olympia, Washington: Coordinating Council for Occupational Education, State of Washington, 1972.

Career education, U.S. Department of Health, Education and Welfare Publication No. (OE) 72-39, 1971. (ED 059 396)
EDRS Price MF-$0.65 HC-$3.29

Career education. U.S. Department of Health, Education and Welfare Publication No. (OE) 73-00501, 1972.

Career education in Arizona. The 3R's plus career education. Phoenix, Arizona: Arizona State Advisory Board for Vocational Education, Arizona State Department of Education, n.d. (ED 063 470)
EDRS Price MF-$0.65 HC-$3.29

Career education: A handbook for implementation. Washington: Government Printing Office, February 1972.

Career education: Papers presented at the 1972 annual meeting of the American Educational Research Association, 1972. (ED 062 539)
EDRS Price MF-$0.65 HC-$3.29

Career education: A position paper. Lincoln, Nebraska: Nebraska State Department of Education, 1972. (ED 069 858)
EDRS Price MF-$0.65 HC-$3.29

Career education: Program goals--accomplishments. Salem, Oregon: Oregon State Board of Education, 1972. (ED 068 663)
EDRS Price MF-$0.65 HC-$3.29

Career education: Report of the AVA Task Force on career education. Washington, D.C.: American Vocational Association, 1972. (ED 065 730)
EDRS Price MF-$0.65 HC-$3.29

Cole, H.P. Process education: The new direction for elementary-secondary schools. Englewood Cliffs, New Jersey: Educational Technology Publications, 1972.

Cornell Institute for Research and Development in Occupational Education. Infusion models: Career education in the elementary school. Ithaca, New York: Instructional Materials Service, Department of Education, Cornell University, 1973. (ED 076 831)

Cottingham, H.F. (ed.) Elementary school guidance: Conceptual beginnings and initial approaches. American Personnel and Guidance Association Reprint Series/One. Washington, D.C.: American Personnel and Guidance Association, 1970. (ED 040 446)

Counseling and guidance: A call for change. Washington, D.C.: National Advisory Council on Vocational Education, 1972. (ED 064 482)
EDRS Price MF-$0.65 HC-$3.29

Davenport, L. and Petty, R. (eds.) Minorities and career education. Columbus, Ohio: ECCA Publications, 1973.

Day, H.I. A new look at work, play and job satisfaction. Speech given before Canadian Guidance and Counseling Association Convention, Toronto, May 30-June 2, 1971. (ED 054 466)
EDRS Price MF-$0.65 HC-$3.29

Denues, C. Career perspective: Your choice of work. Worthington, Ohio: Charles A. Jones Publishing Company, 1972.

DeVore, P.W. Curriculum focus: Occupations and the world of work. Information Series 5. Morgantown, West Virginia: West Virginia University, Appalachian Center, 1969. (ED 072 262)
EDRS Price MF-$0.65 HC-$3.29

Dreves, F.J. Technology for children; a three-year narrative report on technology for children. Edison, New Jersey: New Jersey Occupational Resource Center, 1972. (ED 069 879)
EDRS Price MF-$0.65 HC-$3.29

Drier, H.N., Jr. (ed.) Career development resources, Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

_____. K-12 guide for integrating career development into local curriculum. Worthington, Ohio: Charles A. Jones Publishing Company, 1972. (ED 068 670)

Dunn, J.A. and Others. Career education: A curriculum design and instructional objectives catalog. Palo Alto, California: American Institutes for Research, 1973.

Dunn, J.A. and Others. Individualization of education in career education. Final report. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1972. (ED 072 256)
EDRS Price MF-$0.65 HC-$6.58

Evans, R.N.; Hoyt, K.; Mackin, E. and Mangum, G. Career education: What it is and how to do it. Salt Lake City, Utah: Olympus Research Corporation, 1972.

Gibson, R.L. Career development in the elementary school. Columbus: Merrill Publishing Company, 1972.

Ginzberg, E. Career guidance. New York: McGraw-Hill, 1971.

Glennan, T.K., Jr. Career education and the National Institute of Education. Washington, D.C.: National Institute of Education (DHEW), 1973. (ED 072 315)
EDRS Price MF-$0.65 HC-$3.29

Goldhammer, K. Career education: An educational concept. In Daugherty, R. and Others. Proceedings of the national seminar for state directors of community-junior colleges (January 10-11, 1972). Final report. Washington, D.C.: American Association of Junior Colleges; Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 062 520)
EDRS Price MF-$0.65 HC-$6.58

_____. Roles of schools and colleges of education in career education. In Combined resource papers from the National conferences on career education--for deans of colleges of education and for professors of educational administration. Washington, D.C.: Office of Education (DHEW); Columbus, Ohio: Center for Vocational and Technical Education, 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

Goldhammer, K. and Taylor, R.E. Career education: Perspective and promise. Columbus, Ohio: Merrill, 1972. (ED 064 517)

Goodwin, L. Do the poor want to work? Washington, D.C.: Brookings Institution, 1972.

Gordon, E.W. Broadening the concept of career education, 1972. (ED 068 595)
EDRS Price MF-$0.65 HC-$3.29

Granger, K.M. Junior high career guidance curriculum; student-centered occupational preparation and exploration (SCOPE): Student workbook and teacher supplement. Salt Lake City, Utah: Utah State Board of Education, 1972. (ED 065 687)
EDRS Price MF-$0.65 HC-$9.87

Gysbers, N.C. Elements of a model for promoting career development in elementary and junior high schools. In Microfiche collection of clearinghouse documents reported in abstracts of instructional materials in vocational and technical education (AIM), Fall 1970. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1970. (ED 045 856)
EDRS Price MF-$47.75

Gysbers, N.C., Miller, W. and Moore, E.J. Developing careers in the elementary school. Columbus, Ohio: Merrill, 1973.

Gysbers, N.C., Moore, E.J. and Drier, H.N. Career guidance: Practice and perspectives. Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

Handbook for teachers and administrators of occupational orientation programs in Mississippi. Mississippi State University, Curriculum Coordinating Unit, 1971.

Hansen, L.S. Social aspects and considerations of career education. Paper presented at the U.S.O.E. Institutes for Curriculum Personnel Development, Fort Collins, Colorado and Washington, D.C., 1972. (ED 072 273)
EDRS Price MF-$0.65 HC-$3.29

Hansen, L.S. and Others. Career guidance practices in school and community. Ann Arbor, Michigan: ERIC Clearinghouse on Counseling and Personnel Services, 1970. (ED 037 595)
EDRS Price MF-$1.00 HC-$10.10

Herr, E.L. Review and synthesis of foundations for career education. ERIC Clearinghouse on Vocational and Technical Education, 1972. (VT 014 805)

Herr, E.L. Unifying an entire system of education around a career development theme. In Microfiche collection of clearinghouse documents reported in abstracts of instructional materials in vocational and technical education (AIM), Fall 1970. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1970. (ED 045 856)
EDRS Price MF-$47.75

Herr, E.L. and Cramer, S.H. Vocational guidance and career development in the schools: Toward a systems approach. Geneva, Illinois: Houghton Mifflin, 1972. (ED 068 653)

Holland, J.L. Making vocational choices: A theory of careers. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Holstein, H.B. Career education: A curriculum model and strategies for implementation. Hamlin, West Virginia: Lincoln County Schools, 1971. (ED 059 365)
EDRS Price MF-$0.65 HC-$3.29

Howard County Board of Education, Maryland. Career development resource guide; K-5. 1971. (ED 064 494)
EDRS Price MF-$0.65 HC-$3.29

Howard County Board of Education, Maryland. Career development resource guide; grades 6-8: It's time to plan. 1971. (ED 064 493)
EDRS Price MF-$0.65 HC-$6.58

Hoyt, K.B. Role, function, and approach for guidance in career development of youth from junior high through senior high. (Enclosure with March/April 1969 of "Ohio Guidance News and Views"). Columbus, Ohio: Ohio State Department of Education, 1969. (ED 033 386)
EDRS Price MF-$0.25 HC-$0.70

Hoyt, K.B.; Pinson, N.M.; Laramore, D. and Mangum, G.L. Career education and the elementary school teacher. Salt Lake City, Utah: Olympus, 1973.

Introducing career education to teachers: A handbook for consultants, workshop leaders, and teacher educators. Springfield, Illinois: Illinois State Board of Vocational Education and Rehabilitation, 1972. (ED 067 487)
EDRS Price MF-$0.65 HC-$6.58

K-12 career education guide. Sheboygan, Wisconsin: Lakeshore Technical Institute, 1971. (ED 061 429)
EDRS Price MF-$0.65 HC-$16.45

Keller, L.J. Career education in-service training guide. Morristown, New Jersey: General Learning, 1972.

_____. Personnel development for career education. In Combined resource papers from the national conferences on career education--for deans of colleges of education and for professors of educational administration. Washington, D.C.: Office of Education (DHEW); Columbus, Ohio: Center for Vocational and Technical Education, 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

Kennecke, L.J., Nystrom, D.C. and Stadt, R.W. Planning and organizing career curricula: Articulated education. Indianapolis: Howard W. Sams, 1973.

Kennicott, P.C. and Others. Career communication: Directions for the seventies. Proceedings of the eighth speech communication association summer conference. New York: Speech Communication Association, 1972. (ED 068 994)
EDRS Price MF-$0.65 HC-$3.29

Key, J.P. A theoretical framework for an occupational orientation program. Ann Arbor, Michigan: University Microfilms, Inc., 1969. (ED 037 547)

Kievit, M.B. A review and synthesis of research on women in the world of work. Columbus: Ohio State University, 1972. (ED 066 553)
EDRS Price MF-$0.65 HC-$3.29

Kosuth, J. and Miltenberger, J. Teaching for career decision-making. Tustin, California: Diversified Counseling Services, 1972. (ED 063 547)
EDRS Price MF-$0.65 HC-$6.58

Krebs, A.H. (ed.) The individual and his education. Washington: American Vocational Association, 1972.

Kunze, K.R. Overview of needs, programs, and implementations of vocational counseling and guidance. Paper presented at the Regional Conference on Career Guidance, Counseling and Placement, Burbank, California, April 1970. (ED 049 499)
EDRS Price MF-$0.65 HC-$3.29

Law, G.F. (ed.) Contemporary concepts in vocational education. Washington, D.C.: American Vocational Association, 1971.

Lifton, W.M. (ed.) Educating for tomorrow: The role of media, career development, and society. New York: John Wiley, 1970.

Maley, D. Relationship of industrial arts to occupational orientation. Maryland University, College Park, Department of Industrial Education, 1971. (ED 064 470)
EDRS Price MF-$0.65 HC-$3.29

Marland, S.P., Jr. Career education and community college leadership. Presentation at the installation of the president of Quinebaug Valley Community College, Woodstock, Connecticut, April 1972. (ED 067 475)
EDRS Price MF-$0.65 HC-$3.29

_____. Career education. Presentation before the International Conference on Education, Geneva, Switzerland, September 1971. (ED 056 203)
EDRS Price MF-$0.65 HC-$3.29

_____. Career education: Three speeches by the commissioner. Washington, D.C.: Department of Health, Education, and Welfare, 1971. (ED 062 527)
EDRS Price MF-$0.65 HC-$3.29

_____. Career education--more than a name. Speech presented to the Annual Meeting of State Directors of Vocational Education, Washington, D.C., May 4, 1971. (ED 050 295)
EDRS Price MF-$0.65 HC-$3.29

_____. Career education now. Presentation at the National Association of secondary school principals, Houston, Texas, January 23, 1971. (ED 048 480)
EDRS Price MF-$0.65 HC-$3.29

_____. The need for career education. Presentation at Career Education Workshop, New York, April 1972. (ED 067 450)
EDRS Price MF-$0.65 HC-$3.29

_____. A time for leadership in education. Speech presented to the meeting of the National Council of Administrative Women in Education at the 104th Annual Convention of American Association of School Administrators, Atlantic City, New Jersey, February 1972. (ED 059 176)
EDRS Price MF-$0.65 HC-$3.29

_____. A year ago this week. Speech presented at Luncheon Meeting of the National Press Club, Washington, D.C., December 1971. (ED 059 770)
EDRS Price MF-$0.65 HC-$3.29

Matthews, E.E. and Others. Counseling girls and women over the life span. Washington, D.C.: National Vocational Guidance Association, 1972.

Miller, A.J. A role for technical education in a career education context. Presentation at the American Vocational Association Convention, Chicago, Illinois, 1972. (ED 070 820)
EDRS Price MF-$0.65 HC-$3.29

Moore, S.A. Strategies for implementing exemplary programs and projects in order to make maximum change in the educational process. Microfiche collection of clearinghouse documents reported in abstracts of instructional materials in vocational and technical education (AIM), Fall 1970. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1970. (ED 045 856)
EDRS Price MF-$47.75

Moore, W. Administrative needs and problems in the installation of career education programs. In Combined resource papers from the national conferences on career education--for deans of colleges of education and for professors of educational administration. Washington, D.C.: Office of Education (DHEW); Columbus, Ohio: Center for Vocational and Technical Education, 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

Morgan, R.L. The plan for implementation of an exemplary occupational education program in a rural community. Raleigh, North Carolina: North Carolina State University, Center for Occupational Education, 1970. (ED 050 296)
EDRS Price MF-$0.65 HC-$3.29

McClure, L. and Buan, C. Essays on career education. Portland, Oregon: Northwest Regional Educational Laboratory, 1973.

McGinley, G.P. World of work: Career awareness development program for the elementary grades. Reno, Nevada: Nevada University, College of Education, 1972. (ED 066 605)
EDRS Price MF-$0.65 HC-$6.58

National Advisory Council on Adult Education. Career renewal for adults through education: A position paper from the National Advisory Council on Adult Education. Washington, D.C., 1972. (ED 064 590)
EDRS Price MF-$0.65 HC-$3.29

National assessment of educational progress. Objectives for career and occupational development. Denver, Colorado: Education Commission of the States, 1971. (ED 059 119)
EDRS Price MF-$0.65 HC-$3.29

National Center for Occupational Education. A monograph series on career education. Raleigh, North Carolina: North Carolina State University. Nine titles as follows:

1. Shook, M.W. and Morgan, R.L. A manual for the implementation and administration of career education programs, 1973, 22 pp.

2. Black, M. and Schreiber, R. Lower school curriculum guide, 1973, 33 pp.

3. Clary, J. and Scherer, T.R. Middle school curriculum guide, 1973, 39 pp.

4. Hoyt, K.B. and Woolard, G.G. Upper school curriculum guide, 1973, 47 pp.

5. Childers, B.E. and Nichols, C. Post secondary and adult curriculum guide, 1973, 20 pp.

6. Helling, C.E. and Ruff, E. Career guidance, 1973, 21 pp.

7. Buckingham, L. and Lee, A.M. Student placement and follow-up, 1973, 39 pp.

8. Jervis, R. and Swanson, G.I. Professional development, 1973, 22 pp.

9. Isenberg, R.M. and Smith, J. The community, 1973, 15 pp.

"No room at the bottom: Career education--marketable skills for all." Chapter IV in Annual report of the U.S. Commissioner of Education, fiscal year 1971. Washington, D.C.: Office of Education (DHEW), 1972. (ED 065 659)
EDRS Price MF-$0.65 HC-$6.58

Occupational orientation: An introduction to the world of work. Mississippi State University, Curriculum Coordinating Unit, 1972.

Ohio's career continuum program: Career orientation program; Grades 7-8, Curriculum guide. Columbus, Ohio: Division of Vocational Education, 1972. (ED 064 515)
EDRS Price MF-$0.65 HC-$3.29

Ohio's career continuum program: Career exploration program; Grades 9-10; Curriculum guide. Columbus, Ohio: Division of Vocational Education, State Department of Education, 1971. (ED 065 729)
EDRS Price MF-$0.65 HC-$13.16

Osipow, S.H. Implications for career education of research and theory on career development. In Combined resource papers from the National conferences on career education--for deans of colleges of education and for professors of educational administration. Washington, D.C.: Office of Education (DHEW); Columbus, Ohio: Center for Vocational and Technical Education, 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

Pautler, A.J., Jr. Infusing career education in the curriculum. n.d. (ED 073 325)
EDRS Price MF-$0.65 HC-$3.29

Perspectives of adult education in the United States and a projection for the future. Washington, D.C.: Bureau of Adult, Vocational, and Technical Education, U.S. Office of Education, 1972. (ED 065 734)
EDRS Price MF-$0.65 HC-$3.29

Peters, H.J. and Hansen, J.C. Vocational guidance and career development. Selected readings. New York: MacMillan, 1971.

Peterson, M. and Others. Enrichment of teacher and counselor competencies in career education, K-6: An annotated bibliography. Charleston, Illinois: Center for Educational Studies, School of Education, Eastern Illinois University, 1972.

A plan for career development in the public schools of the District of Columbia. Washington, D.C.: Department of Career Development Programs, Public Schools of the District of Columbia, 1969. (ED 059 346)
EDRS Price MF-$0.65 HC-$3.29

A position and policy statement for career education. Career development in Nevada. Carson City, Nevada: State Department of Education, Division of Vocational-Technical and Adult Education, 1972. (ED 069 859)
EDRS Price MF-$0.65 HC-$3.29

Pucinski, R.C. and Hirsch, S.P. The courage to change: New directions for career education. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Relating education to career needs. Chapter XI in Schools, people and money; the need for educational reform: Final report of the President's Commission on School Finance. March 1972. (ED 058 473)
EDRS Price MF-$0.65 HC-$6.58

Report of AVA Task Force on Career Education. Washington, D.C.: American Vocational Association, 1972.

Reinhart, B. Nature and characteristics of emerging career education curriculum. In Combined resource papers from the National conferences on career education--for deans of colleges of education and for professors of educational administration. Washington, D.C.: Office of Education (DHEW); Columbus, Ohio: Center for Vocational and Technical Education, 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

Ressler, R. Career education: The new frontier. Worthington, Ohio: Charles A. Jones Publishing Co., 1973.

Rhodes, J.A. Vocational education and guidance: A system for the seventies. Columbus, Ohio: Merrill, 1970. (ED 068 657)

The role of industrial arts in career education, Washington, D.C.: American Vocational Association, 1972.

Severinsen, K.N. Career guidance: An individual developmental approach. Columbis, Ohio: Merrill, 1973.

Sjogren, D. Review and synthesis of research on occupational adaptability. ERIC Clearinghouse on Vocational and Technical Education, 1971. (VT 013 206)

Special papers on career education. Trenton, New Jersey: New Jersey State Department of Education, 1972. (ED 069 892)
EDRS Price MF-$0.65 HC-$3.29

Answers to five basic questions about career education.

Apprenticeship training and career education: Conflict or consort?

Career development programs for all.

Computerized career information for improved career guidance services; key information of value to educators considering the use of such systems.

Doctoral dissertations concerning career education, 1960-1971; a list of 781 dissertations related to various aspects of the field of career education.

Highlights of the invitational conference on the Governor's career development program.

Placement: The ultimate test of a school's commitment to its students: A brief explanation of the job placement programs.

Seventh, eighth, and ninth grade exploration; the shape of career exploration programs designed for young teens.

Simulations and career education: A discussion of instructional simulation games of programs of career education.

Why career education? The facts behind the nation-wide movement for schools to accept accountability for placement of students in employment and/or continuing education.

Stadt, R.W.; Bittle, R.E.; Kenneke, L.J. and Nystrom, D.C. Managing career education programs. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Stevenson, J.B. An introduction to career education. Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

Stevenson, W.W. and Sandlin, B.E. Evaluating career guidance, counseling and placement--state level. Identifying areas of concern and determining evidences needed for evaluation: Career guidance, counseling and placement--state level. Oklahoma City, Oklahoma: State Department of Education, 1970. (ED 046 009)
EDRS Price MF-$0.65 HC-$3.29

Stone, S.C. and Shertzer, B. (eds.) Career information and development. Guidance Monograph Series Set IV, Boston: Houghton Mifflin, 1971.

Barre, M.E. College information and guidance.

Brown, D. Students' vocational choices: A review and critique.

Chick, J.M. Innovations in the use of career information.

Herr, E.L. Decision-making and vocational development.

Martin, A.M. The theory and practice of communicating educational and vocational information.

Sinick, D. Occupational information and guidance.

Zaccaria, J. Theories of occupational choice and vocational development.

Zytowski, D.G. Psychological influences on vocational development.

Super, D.E. and Bohn, M.J. Occupational psychology. Belmont, California: Wadsworth, 1970.

Swanson, G.I. Career education. Columbus, Ohio: Center for Vocational and Technical Education, Ohio State University, 1971. (ED 064 480)
EDRS Price MF-$0.65 HC-$3.29

Taylor, R.E. Career education: Implications for increased educational relevancy. Presentation at the Central New York School Council Career Education Conference, Syracuse, October 1972. (ED 068 700)
EDRS Price MF-$0.65 HC-$3.29

_____. Perspectives on career education. Presentation at the meeting of the Oregon Association of School Administrators, Corvallis, March 1972. (ED 064 479)
EDRS Price MF-$0.65 HC-$3.29

Teacher's guide for occupational orientation: An introduction to the world of work. Mississippi State University, Curriculum Coordinating Unit, 1972.

Thompson, J.F. Foundations of vocational education: Social and philosophical concepts. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Tuckman, B.W. An age-graded model for career development education. Trenton, New Jersey: Research Coordinating Unit, Division of Vocational Education, New Jersey State Department of Education, 1971. (ED 060 180)
EDRS Price MF-$0.65 HC-$3.29

Venn, G. Man, education, and manpower. Washington, D.C.: American Association of School Administrators, 1970.

Vocational development in the elementary school. A curriculum resource guide. Beacon, New York: Mid-Hudson Career Development and Information Center, Mid-Hudson Industrial Association, 1970. (ED 065 677)
EDRS Price MF-$0.65 HC-$6.58

Vocation as "calling." Denver, Colorado: Education Commission of the States, 1971. (ED 060 188)
EDRS Price MF-$0.65 HC-$3.29

Wernick, W. Teaching for career development in the elementary school. Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

Whiteley, J.M. and Resnikoff, A. (eds.) Perspectives on vocational development. Washington, D.C.: American Personnel and Guidance Association, 1972.

Willingham, W.W. and Others. Career guidance in secondary education. New York: College Entrance Examination Board, 1972. (ED 070 011)

Work in America. Report of a Special Task Force to the Secretary of Health, Education, and Welfare. Cambridge, Massachusetts: The MIT Press, 1973.

A working curriculum paper on technology and the world of work and careers. Cleveland, Ohio: Case Western Reserve University, Department of Education, 1970. (ED 052 359)
EDRS Price MF-$0.65 HC-$3.29

Working papers on career education. Washington, D.C.: Bureau of Adult, Vocational, and Technical Education (DHEW/OE), 1972. (ED 069 922)
EDRS Price MF-$0.65 HC-$6.58

Workshop handbook: Writing measurable objectives for career education. Springfield, Illinois: Illinois State Board of Vocational Education and Rehabilitation, Vocational and Technical Education Division, n.d. (ED 064 502)
EDRS Price MF-$0.65 HC-$3.29

World of work; first year report, 1971-1972: Working draft of a resource guide for career education, grades 1-6. Mount Pleasant, Michigan: Mount Pleasant Public Schools, 1972.

Worthington, R.M. Career education and the community-junior college. In Daugherty, R. and Others. Proceedings of the national seminar for state directors of community-junior colleges (January 10-11, 1972). Final report. Washington, D.C.: American Association of Junior Colleges; Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 062 520)
EDRS Price MF-$0.65 HC-$6.58

_____. Comprehensive personnel development for career education. Presentation at the Annual Leadership Development Seminar for State Directors of Vocational Education, Las Vegas, September 1971. (ED 066 619)
EDRS Price MF-$0.65 HC-$3.29

_____. The implications of career education for adult education in the United States. Presentation at the UNESCO International Conference on Adult Education, Tokyo, Japan, July 1972. (ED 065 733)
EDRS Price MF-$0.65 HC-$3.29

_____. The need for career education. Presentation at the Invitational Workshop on Career Education, Washington, D.C., March 1972. (ED 066 556)
EDRS Price MF-$0.65 HC-$3.29

Worthington, R.M. New thrusts in adult education. Presentation before the Joint National Conference of the Adult Education Association/U.S.A. and the National Association of Public Continuing Educators (Los Angeles, California, November 1971). (ED 066 616)
EDRS Price MF-$0.65 HC-$3.29

_____. Technical education, careers unlimited. Presentation before the National Technical Education Clinic, Fort Worth, Texas, March 1972. (ED 066 618)
EDRS Price MF-$0.65 HC-$3.29

B. Journal Articles

Arnold, W.M. Career education model. Industrial Arts and Vocational Education, 1971, 60(12), 4-6.

Bailey, L.J. Clarifying some misconceptions. A look at what constitutes career education. Illinois Career Education Journal, 1972, 29(2), 8-13.

Bottoms, G. State level management for career education. American Vocational Journal, 1972, 47(3), 89-92.

Bottoms, G. and O'Kelley, G.L. Vocational education as a developmental process. American Vocational Journal, 1971, 46(3), 21-24.

Brown, D. and Others. Career education: The counselor's role. School Counselor, 1973, 20(1), 193-196.

Bruner, J.S. On the continuity of learning. Saturday Review, 1973, 1(2), 81-84.

_____. The process of education revisited. Phi Delta Kappan, 1971, 54(1), 18-21.

Budke, W.E. Occupational exploration: An aspect of vocational education. Agricultural Education Magazine, 1971, 43(12), 310-311.

Career development. Journal of Industrial Teacher Education, 1972, 9(3), (special issue).

Career education. Educational Leadership, 1972, 30(3), (special issue).

Career education. Journal of Industrial Teacher Education, 1973, 10(2), (special issue).

Career education. Media and Methods, 1973, 9(4), (special issue).

Career education. Thrust for Educational Leadership, 1972, 1(5), (special issue).

Winder, G. Realizing career objectives through regional occupational centers and programs.

Riles, W. California and career education.

Ginzberg, E. Challenge to education.

Fuller, R.W. Eight steps for developing a career education program.

Morgan, R.L. and Others. The development of standards for career education--the state of the art.

Hodgson, J.D. and Hodgson, M.D. Let's put careers into the curriculum.

Nickerman, P.E. Rural California and career education.

Career education: Equipping students for the world of work. College and University Business, 1971, 51(6), 39-44+. Same, Nation's Schools, 1971, 88(6), 35-40+.

Career education: For some the new idea; for others the new order. The American Schoolboard Journal, 1973, 160(5), 27-32.

Career education--is it a fad or a major development? American Vocational Journal, 1972, 47(3), (special issue).

Career education; symposium. Teaching Exceptional Children, 1973, 5(3), 110-132+, (special issue).

Career education: What it's all about. NASSP Bulletin, 1973, 57(371), (special issue).

Career education and you. School Shop, 1973, 32(8), (special issue).

Ciavarella, M.A. Toward an integrated theory of educational and vocational choice. Vocational Guidance Quarterly, 1972, 20(3), 251-258.

Coleman, J.S. The children have outgrown the schools. Psychology Today, 1972, 5(9), 72ff.

DeVore, P.W. Preparing people for the world of work. Journal of Industrial Arts Education, 1970, 29(50), 22-28.

Dobrovolny, J.S. Let's get on with career education. Industrial Arts and Vocational Education, 1972, 61(4), 74-75.

Foster, P.V. Principles of vocational education and their relationship to the emerging concepts in career education. Agricultural Education Magazine, 1972, 45(5), 106.

Germain, J. Notes on educational and vocational guidance. Educational Documentation and Information, (180), 17-22.

Grieder, C. U.S. needs Marland's career education. Nations Schools, 1972, 89(3), 10.

Gust, T. Counseling and guidance for career development. Educational Perspectives, 11(1), 24-28.

Gysbers, N. and Moore, E. Guiding career exploration: Any teacher can. Instructor, 1972, 81(6), 52-53.

Gysbers, N.C. and Moore, E. Media in career development. Educational Technology, 1971, 11(3), 16-17.

Hansen, L.S. Model for career development through curriculum. Personnel and Guidance Journal, 1972, 51(4), 243-250.

Hardwick, A.L. Career education; a model for implementation. Business Education Forum, 1971, 25(8), 3-5.

Harris, R.G. External agencies: Roadblocks to career education. Current Issues of Higher Education, 1972, 27, 245-249.

Hawkins, M.E. Office of education plans for a marketable skill for every student. Science Teacher, 1972, 39(9), 23-24.

Heagerty, F. and King, D. Questions without answers on career education. School and Community, 1972, 59(3), 34-35.

Henry, W.E. Role of work in structuring the life cycle. Human Development, 1971, 14(2), 125-131.

Hoffman, S.D. and Rollin, S.A. Implications of future shock for vocational guidance. Vocational Guidance Quarterly, 1972, 21(2), 92-96.

Hoppock, R. Best books of 1970 on vocational guidance. NASSP Bulletin, 1971, 55(353), 135-142.

Kapel, D.E. Career ladders and lattice: An opportunity for education or a dead end for urban schools? Education and Urban Society, 1970, 2(4), 371-384.

Kennedy, R.P. Career selection syndrome. Adult Leadership, 1972, 21(3), 97-98.

Kirkman, R.E. Career guidance: Some problems. Peabody Journal of Education, 1972, 49(3), 173-174.

Learning resources for career education; symposium. Audiovisual Instruction, 1973, 18(4), 6-9+.

Lewis, J.A. Women and counselors. The Personnel and Guidance Quarterly, 1972, 51(2),

Lippitt, G.L. Developing life plans; a new concept and design for training and development. Training and Development Journal, 1970, 24(5), 2-7.

Lovell, M.R., Jr. Let's cure job unreadiness. Manpower, 1972, 4(2), 26-28.

Marland, S.P., Jr. Career education. Todays Education, 1971, 60(7), 22-25.

_____. Educating for the real world. Business Education Forum, 1971, 26(2), 3-5.

_____. Marland on career education: Interview. American Education, 1971, 7(9), 25-28.

Marland's philosophy of "preventive medicine": Will it work? Nation's Schools, 1971, 88(6), 38-49.

Matteson, H.R. Career education: What is it? Why is it important? Agricultural Education Magazine, 1972, 45(5), 104.

Moore, E.J. and Gysbers, N.C. Career development: A new focus. Educational Leadership, 1972, 30(3), 247-260.

Morrill, W.H. and Forrest, D.J. Dimensions of counseling for career development. Personnel and Guidance Journal, 1970, 49(4), 299-305.

McCarty, D.J. Uneasy look at career education. School Management, 1972, 16(11), 6-7.

McLeod, P. Career education; parents and teachers role. Man/-Society/Technology, 1972, 31(7), 214-217.

Nash, R.J. and Agne, R.M. Career education; the final impoverishment of learning? Peabody Journal of Education, 1973, 50, 245-254.

National advisory council on vocational education. Career preparation for everyone. Vocational Guidance Quarterly, 1972, 20(3), 183-187.

National Advisory Council on Vocational Education. Business Education Forum, 1972, 27(2), 4-6. Same, Vocational Guidance Quarterly, 1972, 21(2), 97-101.

Nelson, H.E. Vocational curriculum: Patterns of experimentation. NASSP Bulletin, 1969, 53, 108-119.

Pierce, W.F. The career education concept. American Education, 1973, 9(3), 4-6.

Prakken, L.W. Some good and some not so good. School Shop, 1972, 32(4), 2.

Task force on career education. Task force report on career education. American Vocational Journal, 1972, 47(1), 12-14.

Task force on vocational education. NEA adopts report increasing support for vocational education. American Vocational Journal, 1971, 46(9), 76.

Tennyson, W.W. Career development: Who's responsible? American Vocational Journal, 1971, 46(3), 54-58.

Tooling up the system from kindergarten through community college. Nation's Schools, 1971, 88(6), 36-38.

Tuckman, B.W. Student-centered curriculum: A concept in curriculum innovation. Educational Technology, 1969, 9(10), 26-29.

USOE's four models: In search of career education complete. Nation's Schools, 1971, 88(6), 43.

Venn, G. Career education: Not a panacea. Business Education Forum, 1972, 27(2), 3-4.

Wall, C.D. Career education: A better way. Education, 1972, 93(1), 51-53.

Wells, C.E. (ed.) Career education; symposium. Phi Delta Kappan, 1973, 54(7), 369-385.

Welsh, J. Career education: A reexamination. Educational Researcher, 1973, 2(2), 12-13.

Wirth, A.G. John Dewey's philosophical opposition to Smith-Hughes type vocational education. Educational Theory, 1972, 22(1), 69-77.

Worthington, R.M. Career education for all America's youth. Agricultural Education Magazine, 1972, 44(9), 219-220.

_____. Why career education? School Shop, 1972, 31(3), 37-39.

Zirbel, H.E. Vocational education: Where humanization works. NASSP Bulletin, 1972, 56(361), 84-86.

C. Bibliographies

An annotated bibliography of resources in the fields of vocational-technical education and vocational guidance. Concord, New Hampshire: New Hampshire State Department of Education, 1970. (ED 038 513)
EDRS Price MF-$0.25 HC-$1.90

Astin, H.S. and Others. Women: A bibliography on their education and careers. Washington, D.C.: University Research Corporation, 1971. (ED 056 271)

Bailey, L.J. (ed.) Facilitating career development: An annotated bibliography. Springfield, Illinois: State of Illinois, Division of Vocational and Technical Education, 1970. (ED 042 217)
EDRS Price MF-$0.75 HC-$6.95

Barabas, J. Women: Their educational and career roles. An annotated bibliography of selected ERIC-IRCD urban disadvantaged series, number 31, August 1972. New York: Columbia University, 1972. (ED 067 423)
EDRS Price MF-$0.65 HC-$3.29

Begle, E. and Others. Career education: An annotated bibliography for teachers and curriculum developers. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1973. (ED 073 297)
EDRS Price MF-$0.65 HC-$13.16

Bibliography on career education. Washington, D.C.: Department of Health, Education, and Welfare, Office of Education, 1973.

Career education, an ERIC bibliography. New York: Macmillan Information, 1973.

Dunn, J.A. and Others. Career education: An annotated bibliography for teachers and curriculum developers. Palo Alto, California: American Institutes for Research, 1973.

A first step toward career education. A project to identify, compile, catalogue, analyze and assess past and present career education efforts to support comprehensive career education model 1 objectives. Volume I and volume II--appendices. Scotsdale, Arizona: Palo Alto Educational Systems, 1972. (ED 060 224)
EDRS Price MF-$0.65 HC-$9.87

Gilrain, J.B. Career education 1972: An annotated bibliography of 173 references. Purdy Station, New York: Career Education, 1972. (ED 072 202)

Guiding students into vocational curricula. A bibliography. Ann Arbor, Michigan: ERIC Clearinghouse on Counseling and Personnel Services, 1970. (ED 039 374)
EDRS Price MF-$0.25 HC-$0.60

High, S.C., Jr. and Hall, L. Bibliography on career education. Working paper. Washington, D.C.: Bureau of Adult, Vocational, and Technical Education, 1972. (ED 070 822)
EDRS Price MF-$0.65 HC-$3.29

Mathieson, M.B. An abstract bibliography of teacher education programs: Part I of the ERIC clearinghouse on teacher education project on career educati[illegible] Washington, D.C.: ERIC Clearinghouse on Teacher Education, 197[illegible] (ED 067 382)
EDRS Price MF-$0.65 HC-$[illegible].29

_____. A bibliography of bibliographies on career and vocational education: Part II of the ERIC clearinghouse on teacher education project on career education. Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1972. (ED 067 387)
EDRS Price MF-$0.65 HC-$3.29

Moore, A.B. Abstracts of instructional materials for career education. Columbus, Ohio: Product Utilization Section, Center for Vocational and Technical Education, Ohio State University, 1972.

Morgan, R.L. and Others. Synopses of selected career education programs: A national overview of career education. Raleigh, North Carolina: North Carolina State University, Center for Occupational Education, 1972. (ED 063 461)
EDRS Price MF-$0.65 HC-$3.29

Nash, R.J. and Agne, R.M. Career education--a humanistic view (Part 3 of the ERIC clearinghouse on teacher education project on career education). Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1973. (ED 071 995)
EDRS Price MF-$0.65 HC-$3.29

Oregon State University. Bibliography of CORE (careers oriented relevant education); related projects and materials. In Microfiche collection of clearinghouse documents reported in abstracts of research and related materials in vocational and technical education (ARM), Fall 1971. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1971. (ED 057 254)
EDRS Price MF-$22.00

Peterson, M. and Others. Bibliography of K-6 career education materials for the enrichment of teacher and counselor competencies (ETC. Project). Charleston, Illinois: Eastern Illinois University, Center for Educational Studies, 1972. (ED 073 287)
EDRS Price MF-$0.65 HC-$9.87

Chapter II

COMPUTER-BASED GUIDANCE SYSTEMS

This chapter deals with theoretical considerations, applications, and surveys of computer-based guidance systems. The great promise of utilizing advanced technology for the improvement of career education and guidance is manifested by the scope and numbers of such systems. Most of these projects are still in the planning and development rather than the implementation phases. Unfortunately several projects have been curtailed or seriously hampered by recently reduced levels of federal funding. The potential of these approaches for storage, retrieval, and student interaction is obvious. The challenge for the practitioner is to be aware of both the advantages and the limitations in applying or adapting these systems to local school settings. Because many of the projects reported here have been long term developmental efforts, the reader may wish to consult pages five to nineteen in the first edition of this bibliography (ED 042 217) for a complete and comprehensive chronology.

Bohn, M.J. and Others. The educational and career exploration system: Field trial and evaluation. Paper presented at American Educational Research Association Convention, Minneapolis, Minnesota, March 1970. (ED 038 661)
EDRS Price MF-$0.25 HC-$0.65

The results of a field test of a computer-assisted counseling system, conducted in a suburban high school are presented (ECES). Three questions were asked: (1) does the education and career exploration system function adequately? (2) does it affect students' vocational development? and (3) what reactions does it elicit from students, parents, counselors, and teachers? The system was designed to provide the student with information concerning his educational and occupational choices for use in post high school educational search. The subjects were: (1) black and white; (2) male and female; and (3) college and non-college bound. An experimental group consisting of students who had used the system and a control group who were not exposed to the system were randomly selected. Results indicate that the system experience leads to higher vocational

maturity. Also, it was used equally by black and white students and by college and non-college bound students. Male students used the system more frequently than female students. Generally, the students were positive about their experience with the system, as were their parents. The counselors agreed on the potential contributions of the system but urged the use of other occupational materials. (RIE)

Related References:

Barnard, C.N. Counseling by computer; how the ECES works in Flint, Michigan. Educational Digest, 1972, 38(1), 19-22.

Myers, R.A. and Others. Preliminary report: Assessment of the first year of use of the educational and career exploration system in secondary schools of Genesee County, Michigan. New York: Teachers College, Columbia University, 1971. (ED 060 482)
EDRS Price MF-$0.65 HC-$6.58

Myers, R.A. and Others. Educational and career exploration system: Report of a two-year field trial. New York: Teachers College, Columbia University, 1972. (ED 071 000)
EDRS Price MF-$0.65 HC-$6.58

Lindeman, R.H. and Others. The educational and career exploration system: First year report of a county-wide field trial and evaluation. Paper presented at The Annual Meeting of the American Educational Research Association, Chicago, April 1972. (ED 065 704)
EDRS Price MF-$0.65 HC-$3.29

Minor, F.J. A computer based educational and career exploration system. Yorktown Heights, New York: International Business Machines Corporation, 1970. (ED 041 305)
EDRS Price MF-$0.25

Brown, J.A. and MacDougall, M.A. Computerized simulated games: A socialization tool for child guidance. Charlottesville, Virginia: Virginia University, 1971. (ED 048 608)
EDRS Price MF-$0.65 HC-$3.29

This paper describes a computer-controlled simulation game designed to teach social skills to elementary school pupils. The major purposes of this man-machine social system are to develop in students the ability to: (1) observe pupil behaviors in group problem-solving situations, (2) identify and analyze the relationship of these behaviors to the success of the group in its problem-solving task, and (3) generalize the implications of these observed behaviors to other settings. The game consists of three stages which correspond to the above objectives and represents an integrated instructional system in which pupils, counselors, and media components interact. In the first stage the pupil views video tapes which present a wide range of pupil behavior types in a group setting. The second stage requires the pupil to analyze his observations by interrogating a computer system. In the final stage students meet with a counselor in a group discussion to evaluate the information they have individually acquired. They examine alternative solutions to the problem and a consensus is achieved through an exchange of various socio-cultural views held by the participants. Implications of such a system for elementary school counseling are discussed. (RIF)

Burnham, R.W.; Johnson, D.H. and Youst, D.B. Some applications of education media in a support system for educational and career planning. Chapter IX in Lifton, W.M. (ed.), Educating for Tomorrow, Wiley & Sons, 1970.

The research and development of the Rochester Career Guidance Project is the subject of this chapter. The authors, all involved in the Rochester project, discuss: the design considerations in a support system, technical aspects of a support system, available technology, current project activities and new materials. The development and utilization of a "man-machine guidance system" are illustrated with photographs and text of actual project materials.

Career education and the technology of career development. Proceedings of the 8th Invitational Conference on Systems under Construction in Career Education and Development, Palo Alto, California, October 1971. (ED 068 716)
EDRS Price MF-$0.65 HC-$9.87

This report of proceedings includes numerous speeches, grouped in four topical areas: (1) systems for career education, (2) career development and systems at the American Institutes for Research, (3) current status of other career development systems, and (4) career education and the technology of career development. The Career Education Program's four models--school-based, employer-based, home-community based, and residential--are discussed. Career guidance and counseling, implementation problems, computer-free and computer-involved guidance systems, and related topics are covered. A wide range of resource materials is appended. (RIE)

Cassel, R.N. and Mehail, T. Milwaukee computerized vocational guidance system (VOCGUID). Vocational Guidance Quarterly, 1973, 21(3), 206-13.

VOCGUID affords individuals an opportunity to narrow career planning choices through a process of computer-based criteria search and interrogations designed to align personal interests with specific job requirements.

Computerized vocational information system (CVIS), Willowbrook High School. White Plains, New York: IBM brochure GK20-0675-0, September 1973.

Project CVIS (Computerized Vocational Information System) represents one of the most successful efforts in the development of computer-based guidance systems and more recently has included some administrative and instructional facilities. Since January 1967 it has been under constant growth and expansion at Willowbrook High School in Villa Park, Illinois (15 miles west of Chicago). The computer, a System/360 Model 40, and community college guidance applications have been provided by College of DuPage in Glen Ellyn, Illinois. Glen Crest Junior High School, also located in Glen Ellyn, has served as the experimental site for the testing of a junior high vocational exploration program. The development and operation of Project CVIS has been substantially supported by the Illinois State Board of Vocational Education and supplemented by both High School District 88 and Community College District 502. The project was designed and developed by JoAnn Harris, Lorraine Foster, and Enzo Giuntoli.

Related References:

Harris, J.E. Analysis of the effects of a computer-based vocational informational system on selected aspects of vocational planning. Unpublished doctoral dissertation, Northern Illinois University, 1972.

Melhus, G. Computer-assisted vocational choice compared with traditional vocational counseling. Unpublished doctoral dissertation, Illinois Institute of Technology, 1971.

Price, G.E. A comparison of computer and counselor effectiveness in assisting high school students to explore and select courses. Unpublished doctoral dissertation, Michigan State University, 1971.

Elliott, P.H. Computers in education; relevance for occupational education. Audio-Visual Instruction, 1973, 18, 7-9+.

The computer's role in educational research, management and instruction is described. Numerous potential applications of computer-assisted instruction in occupational education are cited. A number of ongoing CAI projects and their applications are enumerated.

Estavan, D.P. and Others. Implementation of vocational counseling system, and computer prediction and counselor prediction. Final report. Santa Monica, California: System Development Corporation, 1969. (ED 042 035)
EDRS Price MF-$0.25 HC-$1.55

The school counselor is forced to make important decisions in predicting student success. He makes these decisions, correctly or incorrectly, based on available data pertaining to that student. This two part study sought to determine the advantages of using a computer for handling information and making predictions and to see whether the counselor would properly challenge computer predictions. Thus, ten junior high counselors supplied with corresponding computer predictions were asked to predict success in algebra for 100 anonymous eighth-grade students. Multiple linear regression analysis revealed that counselors tend to be optimistic in their predictions but that

they were not unduly influenced by the computer predictions. A related document is available as ED 017 710. (RIE)

The feasibility of computer assisted college selection as a guidance counseling aid. Bethesda, Maryland: Creative Concepts, Inc., 1970. (ED 046 362)
EDRS Price MF-$0.65 HC-$3.29

This study analyzed and determined the feasibility of a computerized college selection service for high school students. One thousand seniors were randomly selected from among the public school system in Region III. They completed a questionnaire detailing their qualification for college admission and preference for college characteristics. This information was matched with a computerized college data bank and 10 schools most closely approximating the student's interest and abilities were identified. In addition, each cooperating counselor completed a questionnaire that presented information on the counselor's "level of satisfaction" with each student's college selections as determined by the computer. The study also developed comparative statistics about the preferences and trends of the sample. The appendices include: the guidelines for student selection, the counselor questionnaire, the C.A.M.P.U.S. questionnaire, a sample answer sheet, a list of computerized college selections, and an explanation of the computer print-out. (RIE)

Finney, J.C. A system of computerized reports for counselors. Washington, D.C.: American Personnel and Guidance Association, 1970. (ED 039 591)
EDRS Price MF-$0.25 HC-$0.50

This development of a system of computerized reports for counselors is described. New scales and measures of the basic variables of personality were derived. The data collected over the course of seven years was analyzed. Various forms of programmed reports emerged, two of which are reported in this paper. These two, one for general counselors and one for correctional counselors, are examined. An example of their possible application is given. A nationwide survey of counselors is cited as affecting the decision

to add, subtract, and change certain features. The survey also shows differences in the interests of various kinds of counselors and precipitated questions regarding the appropriateness of the forms for certain of these counselors. Conclusions are discussed briefly. (RIE)

Gillen, W.K. et al. A computer-assisted guidance system: Try-out in a high school. Focus on the Future, 1970 APGA Convention Abstracts, March 1970, p. 101.

The Educational and Career Exploration System was available to students on a scheduled basis during the school day and unscheduled for one hour after school. Use of the system was essentially self-directed. "Positive student response was inferred from the few open periods during the field trial and the voluntary signing up in advance for the extra hours after school." Usage pattern analysis is provided.

Hallworth, H.J. and Others. A computer assisted vocational counseling system. Paper presented at the Canadian Council for Research in Education, Ottawa, Ontario, March 1970. (ED 038 686) EDRS Price MF-$0.25 HC-$0.80

The development of a counseling system designed for a small computer, although limited in both scope and objectives, appears to be practicable and economical. Described herein is a program intended to perform some of the functions performed by a counselor. It is merely a tool to be used by a counselor, not a replacement for him. The program described applies to vocational counseling. Keeping data current is simplified by using a computer. The main object of such a program is to promote the decision-making ability of the student by making information available to him, and by giving him the opportunity for vicarious experiences in making occupational choices. A total of three precise tasks in the design of this exploration system are indicated: (1) the development of interest categories; (2) the development of categories of educational aspirations; and (3) the classification of a given set of occupations in terms of the specified interest and educational categories.

The system may then be used by students or counselors in any of three modes: (1) exploration, (2) index, or (3) guidance. This program has been implemented on a DEC TSS-8 system, for reasons described in another paper. It is being used in the Faculty of Education, The University of Calgary. (RIE)

Harris, J. Computer assisted guidance systems. Washington, D.C.: American Personnel and Guidance Association, 1972, 24 pp.

A new monograph published by the National Vocational Guidance Association for counselors and school administrators who are considering the use of computers in the guidance of youth. This concise monograph describes the computer's present involvement as well as three distinctive types of computer systems, explains what has been learned from those systems presently in operation, provides 16 questions to be asked and answered before a decision is reached to implement a computer-assisted guidance program, discusses guidelines for evaluation or development of computer-assisted guidance systems, and lists sources of information.

Holtzman, W.H. Computer-assisted instruction, testing, and guidance. New York: Harper and Row, 1970.

The papers on which this book is based were prepared for a conference at the University of Texas in Austin in October 1968, organized by the Social Science Research Council and the College Entrance Examination Board. The papers are divided into the following sections: system design; instructional design; optimizing learning; individually tailored testing; language processing; Stanford programs in arithmetic, logic, and Russian; simulation of science experiments; complex man-machine systems; and guidance and counseling. In addition two papers of general interest are presented: "Computers and the Purposes of Education" by Emmanuel Mesthene and "Computers in Education" by Wayne Holtzman.

Jones, G.B. and Others. Development and evaluation of a comprehensive career guidance system. Final report. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1971. (ED 055 310)
EDRS Price MF-$0.65 HC-$9.87

A Comprehensive Career Guidance System (CCGS) for programs of individualized education where computer support facilities are available is described. The CCGS program employs a systematic approach to develop and evaluate guidance-oriented objectives and related instructional and counseling experiences for youth. This systematic approach involves 5 types of activities: (1) identification of youth development needs; (2) classification of objectives by commonalities and priorities; (3) specification and selection of all possible alternative strategies for individualized programs; (4) design, scheduling, and implementation of selected strategies; and (5) evaluation and feedback of the efficiency and effectiveness of designed programs. The authors suggest that the ultimate aim of this program is to provide a comprehensive data bank of behavioral objectives, each keyed to a variety of appropriate instructional counseling, and evaluational materials and procedures available for student, parent, counselor, and teacher use. (RIE)

Related References:

Hamilton, J.A. and Others. Measuring the outcomes of an individualized career guidance system. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1972. (ED 065 789)
EDRS Price MF-$0.65 HC-$3.29

Jones, G.B. and Others. Planning and implementing a comprehensive career system of individualized guidance. Description of a program for effective personal problem solving. The CCGS personal and social development program, Palo Alto, California: American Personnel and Guidance Association, 1970. (ED 041 298)
EDRS Price MF-$0.25 HC-$1.30

Nelson, D.E. Orienting students to an individualized educational system of the 70's. Palo Alto, California: American Institutes for Research, American Personnel and Guidance Association, 1970. (ED 040 430)
EDRS Price MF-$0.25 HC-$0.90

Jones, G.B. Using Project TALENT to improve vocational guidance. Washington, D.C.: American Institutes for Research, American Vocational Association, 1968. (ED 034 242)
EDRS Price MF-$0.25 HC-$0.65

Hamilton, J.A. and Jones, G.B. Integrating and evaluating career information in a developmental guidance program. Palo Alto, California: American Institutes for Research in Behavioral Sciences, American Personnel and Guidance Association, 1970. (ED 039 587)
EDRS Price MF-$-.25 HC-$0.65

Jones, G.B. and Nelson, D.C. Elements of a comprehensive guidance system integrated in the instructional process. Washington, D.C.: American Personnel and Guidance Association, 1969. (ED 033 398)
EDRS Price MF-$0.25 HC-$0.70

Katz, M.R. Interactive computer system will help students make career decisions: Educational testing service's system of interactive guidance and information. Vocational Guidance Quarterly, 1971, 20(1), 61-2.

Martin Katz and his associates at Educational Testing Service are developing a "System of Interactive Guidance and Information" that actually teaches the student how to think about vocational choices rationally and systematically. The Information system lets the student discover where he can find satisfaction. The student learns his chances of success in different options.

Related Reference:

Katz, M.R. Career guidance: expanding the student's decision-making power. National Association of Secondary School Principals Bulletin, 1970, 54(346), 88-95.

Lunneborg, C.E. Psychometrics discovers the computer: Discovering test items and people. Seattle: Washington University, 1972. (ED 061 524)
EDRS Price MF-$0.65 HC-$3.29

This is the text of a colloquium of recent computer technology on psychometrics, particularly as practiced in the University of Washington's Bureau of Testing. Seven stages of career guidance are enumerated: (1) deciding what to measure; (2) developing the measures; (3) administering the measures; (4) scoring the measures; (5) weighting the scored measures; (6) reporting predictions; and (7) evaluating effectiveness. The impact of the computer on each stage is elaborated. The author argues against what he considers to be the fallacious assumptions underlying guidance in the past. He cites the major shift as looking at career decision-making from the point of view of the decision maker rather than from the point of view of society or one of its institutions. The paper concludes with a description of a decision value oriented career guidance system. (RIE)

Martin, A.M. A humanistic approach to stimulating and motivating culturally different youth toward vocational development. Paper presented at the American Personnel and Guidance Association Convention, New Orleans, Louisiana, March 1970. (ED 039 606) EDRS Price MF-$0.25 HC-$0.60

The author reviews the applications of computer-based retrieval and training systems and behavioral counseling programs in vocational guidance. Conclusions reached were that the student and the practitioner should be provided with an opportunity, within a humanistic guidance framework, to learn analysis and interpretation of data in terms of intrinsic values and concepts of what is meaningful to the student. It was assumed that the learner has the right to know what is happening to him and that, therefore, subsequent guidance should be more than a matter of the individual responding to external rewards and punishments which condition his behavior. End results are achieved through media technology in the forms of situational films, videotaping and audiorecording. The films are based on psycho-social models and themes drawn from theoretical and empirical vocational guidance research. (RIE)

Mitzel, H.E. Experimentation with computer-assisted instruction in vocational-technical education, 1965-1970. Final report. Pennsylvania State University, University Park, 1971. (ED 059 618)
EDRS Price MF-$0.65 HC-$9.87

A computer-assisted instruction (CAI) project focused primarily on curriculum development in three technical areas: science, mathematics, and communication skills. The project also sought (1) to develop specific course material and methods of presentation; (2) to provide explanations of various techniques and strategies for dealing with course development, with emphasis on the education of vocational education teachers; (3) to evaluate and articulate the combination of CAI with other educational strategies, and (4) by means of careful experimentation, to determine optimum formats for vocational-technical material taught with computer assistance. The four-year project used first an IBM 1410 computer and then an IBM 1500; programs were in the COURSEWRITER language. In this report the curriculum material in mathematics, spelling, engineering science, testing, and occupational guidance are presented in some detail, along with the systems programs for display and coding, research studies into educational strategies and equipment evaluation, and the flowcharts developed by the project. The dissemination activities of the project are summarized. (RIE)

Pepyne, E.W. The development and evaluation of an interactive computer system for use in counselor education. Final report. West Hartford, Connecticut: Hartford University, 1970. (ED 058 744)
EDRS Price MF-$0.65 HC-$6.58

Within the context of programmatic research and an empirical systems approach, an interactive computer system was designed for use in counselor education and assessment. This report first describes the identification of several discrete counseling styles and the development of the Counselor Repertoire Developments System (CRD) to analyze the counseling task, and then concentrates on the design, development, and evaluation of an integrated subsystem of CRD--the Sequential Automated Monitoring of Counselor Repertoire Development (SAMOCORD). A brief overview of requirements for SAMOCORD implementation is provided. The basic objectives of the project are described: the development of a testing program

called Program Self-Assessment; the development of a counseling simulation program called Program Counseling Exercises; the development of an interactive process analysis program called Program Interview Analysis; and the development of a computer program for use on remote terminals to provide a linguistic analysis of interview content called Program Interview Content Analysis. The remainder of the report describes the developmental procedures, evaluative activities, and implications for counseling curriculum development and research. (RIE)

Pierce, R. Careers on the computer (occupational information access system). American Education, 1972, 8(7), 31-35.

A communications network originally designed for school record keeping is being utilized as part of the Occupational Information Access System (OIAS) in which 40 Lane County (Oregon) junior and senior high schools are linked to a computer in Eugene via telephone lines. Students utilize the system themselves to secure occupational information they might otherwise not pursue or secure via traditional guidance channels. Results indicate a high degree of success with student-utilized computerized information.

Prediger, D.J. Validation of counseling-selection data for vocational school students. Final report. Toledo University, Ohio, 1970. (ED 045 831)
EDRS Price MF-$0.50 HC-$5.25

The general objectives were to develop and implement computer-based procedures for obtaining validated data on the characteristics of vocational school students, and to convert this data into counseling information. To do this, two types of data information conversion procedures were used: discriminate analysis and regression analysis. Scores from 36 aptitude, interest, and personality measures were accumulated for approximately 1,600 prospective vocational high school students as well as a progress record for each of these students while attending the vocational high school. Multivariate analyses conducted on antecedent and criterion data formed the bases for data information conversion procedures used in the field

tests involving 900 prospective students. Results of the study support the development of a generalized system of computer-based procedures for data information conversion as both feasible and desirable. Work was started on a generalized Test Validation and Information Feedback System which is scheduled to be operational by late 1970. Project activities will continue with local support. (RIE)

Prochnow, W.G. Computerized counseling--a new horizon. Focus on the Future, 1970 APGA Convention Abstract, March 1970, p. 259.

Describes a program followed by the Youth Opportunity Center for Counseling youths with the assistance of a computer.

Roach, A.J. A man-machine system for contemporary counseling practice: Diagnosis and prediction. College Station, Texas: Texas A & M University, 1970. (ED 038 668)
EDRS Price MF-$0.25 HC-$0.40

This paper looks at present and future capabilities for diagnosis and prediction in computer-based guidance efforts and reviews the problems and potentials which will accompany the implementation of such capabilities. In addition to necessary procedural refinement in prediction, future developments in computer-based educational and career predictions will probably see the extension of biographical data inputs as well as inputs from various measurement instruments administered inactively by the computer. These will greatly extend the data base on the individual student and consequently increase the capacity for generating more significant predictions. Diagnosis or the detection of patterns of organization of surface behaviors is not being used presently. The computer could monitor such patterns and the counselor could make a clinical-type judgment regarding its meaning in specific cases. Another analysis could be the detection of population trends and characteristics. The problems associated with such computer use include: (1) cost; (2) loss of humaneness; (3) fitting the individual into the population; (4) misuse; and (5) sharing results. (RIE)

Roberts, T.L. and Others. The Bartlesville System; TGISS Software Documentation. Stillwater, Oklahoma: The Research Foundation, Oklahoma State University, 1970. (ED 066 044)
EDRS Price MF-$0.65 HC-$6.58

TGISS (Total Guidance Information Support System) is an information storage and retrieval system specifically designed to meet the needs and requirements of a counselor in the Bartlesville Public School environment. The system, which is a combination of man/machine capabilities, includes the hardware and software necessary to extend the counselor's capabilities by providing ready access to student information under secure conditions. The functional requirement specifications for the basic retrieval system of TGISS are stated in this report along with a general description of the system including the remote terminals, central site, and data base design. Various software components are explained. The external design requirements and capabilities of the user's command language are specified, and descriptions of provisions for data base security and the television displays are included. (RIE)

Related References:

Readings in computer based guidance. The Bartlesville System. Washington, D.C.: American Educational Research Association, 1970. (ED 042 223)
EDRS Price MF-$0.50 HC-$3.85

Richardson, W.E. An evaluation of computer-assisted counseling. Unpublished doctoral dissertation, The University of Tulsa, 1973.

Roberts, T.L. and Keahey, S.P. Gaming for vocational awareness; A systems approach. The Bartlesville System. Stillwater, Oklahoma: The Research Foundation, Oklahoma State University, 1970. (ED 037 754)
EDRS Price MF-$0.25 HC-$1.55

Super, D.E. et al. Computer-assisted counseling, New York: Teachers College Press, 1970.

A "rounded-out" story of computer-assisted counseling is presented by author-editor Super and his collaborators: William W. Cooley ("Computer Systems for

Guidance"); David V. Tiedeman ("The Information for Vocational Decisions"); JoAnn Harris ("The Computerization of Vocational Information"); Frank J. Minor ("An Experimental Computer-Based Educational and Career Exploration System"); John Loughary, Deloss Friesen and Robert Hurst ("Autocount: A Computer-Based Automated Counseling Simulation System"); Martin J. Bohn, Jr. ("Field Trial and Evaluation of a System"); Roger A. Myers ("Computer-Aided Counseling: Some Issues of Adoption and Use"); and D.E. Super ("Computers and Counselor Use" and "Computer-Assisted Counseling: Present Status and Future Developments").

Tiedeman, D.V. and Others. An information system for vocational decisions. Final report. Cambridge, Massachusetts: Harvard University, 1970. (ED 042 046)
EDRS Price MF-$0.50 HC-$4.75

The decision-making process requires more than merely gathering and having access to data. It also involves gathering the "correct" data and "interacting" with that data to realize a desired outcome. To provide students with this type of data about education and work opportunities in such a way that they can relate it to their own goals was the objective of the computer based information System for Vocational Decisions (ISVD). However, field tests of the system were hampered by technical problems and by the misunderstanding of the objective of ISVD. The project did clearly demonstrate that it is possible to: (1) interact with an inquirer in a natural language medium. (2) interact with several inquirers simultaneously, (3) recognize and respond appropriately to individual requests, and (4) provide facts and data at various levels of specificity to suit the mode in which the user is operating. (RIE)

Related References:

Yee, P. and Others. The construction and implementation of a data base. Project Report No. 30. Cambridge, Massachusetts: Harvard University, 1970. (ED 052 488)

Roman, R.A. The Script network: Present conditions and suggestions. Project Report No. 31. Cambridge, Massachusetts: Harvard University, 1970. (ED 052 493)
EDRS Price MF-$0.65 HC-$6.58

O'Mahoney, T.J. The self concepts profiling technique: A procedure for the exploration of self concept systems. Project Report No. 32. Cambridge, Massachusetts, Harvard University, 1970. (ED 052 483)
EDRS Price MF-$0.65 HC-$3.29

Roman, R.A. Manual for GLURP: A computer assisted instruction language. Project Report No. 33. Cambridge, Massachusetts: Harvard University, 1970. (ED 052 491)
EDRS Price MF-$0.65 HC-$6.58

Scott, H. Program description-HASM: Hierarchical access storage management. Project Report No. 34. Cambridge, Massachusetts: Harvard University, 1970. (ED 052 484)
EDRS Price MF-$0.65 HC-$3.29

Brewster, D. Program description-DASM: Direct access storage management. Project Report No. 35. Cambridge, Massachusetts: Harvard University, 1970. (ED 052 485)
EDRS Price MF-$0.65 HC-$6.58

Tiedeman, D.V. Can a machine develop a career? A structure for the epigenesis of self-realization in career development. Chapter 5 in Whiteley, J.M. and Resnikoff, A. (eds.) Perspectives on Vocational Development, Washington, D.C.: American Personnel and Guidance Association, 1972.

The machine as instrument, not master, in the career development of the individual is the theme explored by Tiedeman. The author "specifies the instrumentality of career development," indicates how this theory "fits the vocational development work of Bordin, Nacham, and Segal and of Holland, Roe and Super . . ." and how "we can provide machines that will do a pretty fair job of developing careers for individuals in the simulation sense of 'imitation.' "

Tiedeman, D.V. and Dudley, G.A. Prospects for technology and commerce in the mediation of vocational development for vocational maturity. Speech given at the National Conference on Occupational Education, Chicago, Illinois, May 1967. (ED 062 649)
EDRS Price MF-$0.65 HC-$3.29

The focus in this working paper is on the process of mediation through which occupational facts/data

become part of a personal educational process. Numerous points are covered: (1) the relationship between media and mediation; (2) vocational development as a goal of occupational information mediation; (3) personal responsibility for goal determination during the mediation of occupational facts/data; (4) prospects for technology and commerce in the mediation of vocational development for vocational maturity; and (5) the challenge which the new concept "mediation of vocational maturation" provides for counselors. The authors believe that a new era in vocational guidance is beginning, one during which new knowledge in vocational development and media can be effectively and advantageously controlled by computers toward the goal of mediating vocational maturation with its emphases on personal growth and self-determined choices. (RIE)

Willowbrook High School, Illinois. Report of Sixth Vocational Guidance Systems Conference, December 19-20, 1969. Conference on development and implications of computer-based guidance systems.

For the past four years, twenty to thirty professionals who are interested and involved in the development and implementation of computer-based guidance systems have met once or twice per year. The purpose of these meetings has been to share philosophies, issues, and findings, and to view systems as they become operational. Willowbrook High School, because of its development of Project CVIS, (Computerized Vocational Information System) was asked to host the Sixth Invitational Vocational Guidance Systems Conference on December 19 and 20, 1969. This report is a summary of presentations given on those two days. It includes summaries of seven operational projects.

Chapter III

CAREER EDUCATION CONFERENCES, WORKSHOPS AND INSTITUTES

The material in this section represents a unique source of literature. Typically, conferences of the nature described here grow out of an awareness of the need to systematically explore a predetermined problem or objective. The most common conference format is one in which background papers are presented by recognized authorities, work groups are formed, and discussion or related participant interaction follows. The primary value of these kinds of activities is the opportunity to expand the dialogue among various constituencies via a sharing of knowledge and expertise. Not only do these conferences have a valuable role in leadership development, but the background papers, conference proceedings, policy statements, etc. provide valuable operational guidelines for implementing career development activities.

AVA Report. Presentations at post secondary education seminar, New Orleans, December, 1970. (ED 053 316)
EDRS Price MF-$0.65 HC-$3.29

This report contains the major presentations made at the American Vocational Association Convention, and also summarizes the group discussions which included conclusions and recommendations of the groups. Opening remarks were made by Mr. Lowell A. Burkett, with presentations including: (1) "Manpower Programs and Postsecondary Educational Institutions" by Charles O'Dell, (2) "Legislation for Career Education in Postsecondary Institutions" by Charles Radcliffe, (3) "Career Education" by Marvin Feldman, and (4) "The American Vocational Association and Its Commitment to Evaluation and Accreditation" by Joseph T. Nerden. A brief summary statement, made in lieu of an oral summary, by C. Nelson Grote is included. (RIE)

Barriers to effective career education; panel discussion. Compact, 1972, 6(4), 32.

Panel expressed mutual concern over the state of career-oriented curriculum in the public schools. "We haven't

prepared people for life, according to Richard C. Hawk, executive director of the Minnesota Higher Education Coordinating Commission, and a panel member along with: John C. Pittenger, Pennsylvania Secretary of Education; Wesley N. Dorn, director of the Maryland Council for Higher Education; John C. Mundt, director of the State Board for Community College Education of Washington, D.C.; James E. Stratten, California Chief of the Division of Apprenticeship Standards; and Ms. Raye E. Miller, chairman of the North Dakota Advisory Council for Vocational Education. The panel stressed the importance of all kinds of work, the appalling overemphasis on professional careers and the great need for career-oriented education.

Beck, J.R. Conference proceedings: Community dialog in career education part I, San Jose, California, July 1972. (ED 074 238) EDRS Price MF-$0.65 HC-$3.29

A total of 250 educators and representatives from business, industry, and civic organizations attended the first of a series of dialogs on career education. This 1-day conference was devoted to identifying questions and generating suggestions and ideas regarding career education. Major presentations were: (1) "Career Education--Problems and Promises" by R. Harris, (2) "School-Based Career Education" by R. Sampieri, (3) "Employer-Based Career Education" by R. Peterson, (4) "A Search for Relevancy--California Plans for Career Education" by P. Peters, and (5) "Industry's Commitment to Education--Investment in the Future" by C. Horne. In addition to presentations, participants were divided into 25 discussions groups, which were to formulate a definition of career education, identify needed curriculum changes, suggest future directions for conferences, cite examples of career education in practice, and identify appropriate implementation strategies. Texts of the major presentations, discussion group responses regarding a definition for career education and needed curriculum changes, and a final summation of the conference are included in this publication. (RIE)

Blikre, C.T. Let's get with it! Presentation at the All-Service Vocational Education Conference, Bismarck, North Dakota, August 1972. (ED 068 731)
EDRS Price MF-$0.65 HC-$3.29

In spite of societal and economic changes, our schools still operate as they always have. Career education models will become a major tool in resolving educational problems and needs, and in reordering priorities for North Dakota. Educational and socioeconomic statistics confirm the current inadequacy of vocational preparation by our public education systems. There is a very real need for post-secondary training for the rapidly expanding professional and technical occupations. To correct this situation, a comprehensive vocational development program is needed which would involve cooperative interrelationships among the home, family, community, and the world of work. Tables and charts present the data, and an action plan for implementing career education in North Dakota outlines the personnel, resources, and activities needed. (RIE)

Blake, D.L. and Gutcher, G.D. New vocational education concepts and programs in metropolitan areas, Institute I. Final report. Fort Collins, Colorado, 1971. (ED 056 202)
EDRS Price MF-$0.65 HC-$6.58

Fifty-eight persons participated in an institute designed to provide the opportunity of sharing ideas and experiences in relation to innovative school systems and vocational programs for the disadvantaged and the potential dropout. Participants heard and reacted to the following presentations: (1) "Educational Programs and Career Opportunities as a Motivating Force for Students" by Merle Strong, (2) "Innovative Programs Designed for Junior High and Elementary Schools in the Exploratory Phase of Vocational Education" by Elizabeth Benjamin, (3) "Exemplary Vocational Programs in Pontiac, Michigan" by Maurice Prottengeier, and (4) "Implementing Exploratory Occupational Programs in New Counseling Techniques to Assist Students to Realistically Enter the World of Work" by Edwin Richardson. The responses to the evaluation form administered at the end of the 5-day institute indicated that the experience had been valuable. Several individuals in positions of leadership immediately took steps to implement within their own state, area, or school district some of the concepts presented at the institute. (RIE)

Borman, C.A. and Reilley, R.R. (eds.) Vocational guidance in the 70's. Proceedings of the Texas A & M University Vocational Guidance Conferences, College Station, 1971. (ED 056 933)
EDRS Price MF-$0.65 HC-$6.58

This conference report on vocational guidance mainly deals with the proper relationship of the vocational counselor and the traditional counseling program in the school. The strategy developed by the conference planners centered upon the involvement of teams of vocational counselors in discussions, panels, and presentations by educated men in the field. Four major sets of papers were presented at the conference and are contained in the handbook, followed by a transcript of the panel discussions held by the groups of vocational counselors. The major papers are divided into two similar parts: (1) Realities of Vocational Guidance, and (2) Projections for Vocational Guidance in the '70's. (RIE)

Bottoms, J.E. (Gene), Orientation to new concepts and programs of career orientation and occupational education for students in rural areas. Final Report, Institute VI, Raleigh, North Carolina, 1970. (ED 057 966)
EDRS Price MF-$0.65 HC-$6.58

The primary objective of the institute was to provide participants with a more complete understanding of (1) the need for career orientation for rural youth and (2) new concepts and implementation strategies in exemplary programs of career orientation and occupational education at the elementary, junior high, and senior high school levels. To accomplish this objective, a 1-week institute was held in Raleigh, North Carolina, for 72 participants who had been recommended by their state directors of vocational education. The institute consisted of qualified personnel presenting background information and description of model programs for providing career development from kindergarten through grade 12. Participants were assigned to 8 task groups for the purpose of formulating guidelines for the implementation of programs in their own states or institutions. In the document, abstracts of exemplary programs at each educational level are presented, along with background papers that serve as a frame of reference for the development of a total career development education program for rural youth. (RIE)

Burns, W.E. Public service occupations in career education. Selected excerpts and recommendations of the National Advisory and Review Committee Public Service Occupations Curriculum Project, Sacramento, California, January 1972. (ED 062 526) EDRS Price MF-$0.65 HC-$3.29

In January 1972, a national advisory and review curriculum committee met at the U.S. Office of Education to: (1) review a report which was to serve as the framework within which the secondary level public service occupations curriculum would be developed, (2) discuss the general concepts and related issues in preparing individuals and/or groups for employment in public service, and (3) hold discussions focusing on six generic questions concerning project implementation. As a summary of that meeting, this report provides project staff and consultants with insights into the problems of career development for public service occupations, as well as solutions to those problems. The report is organized around six key issues confronting project implementation. Also 36 specific recommendations and nine general recommendations have been identified to further assist in project management and implementation. (RIE)

Carney, C.G. A career development workshop for emotionally disadvantaged students. Kansas State University, Manhattan. Center for Student Development. September 1972. (ED 072 367) EDRS Price MF-$0.65 HC-$3.29

The investigation described in this study was a two part procedure which attempted to answer the general question: "Do the constructs of indecision and indecisiveness adequately describe disadvantaged individuals who experience difficulties in making a career decision?" The sampling was from a population of disadvantaged high school and college students. The first part of the study, which tested the effectiveness of the University of Utah Counseling Center's Career Planning Workshop as a treatment for vocational undecidedness in a disadvantaged population, did not yield statistically reliable differences between the experimental and control groups. The second segment of the study was an exploratory rather than definitive investigation of the general question given above. The subjects had all experienced the Career Planning Workshop;

one group showed an increase in degree of career decidedness subsequent to workshop treatment, while the second group did not show an increase. Both groups were given the Vocational Development Inventory and the State-Trait Anxiety Inventory. Although differences between the groups were not statistically reliable, the group which had increased in decidedness exhibited greater vocational maturity and less state- and trait-anxiety than the group which had not shown an increase in decidedness. References are included. (RIE)

Career education and the businessman: A handbook of action suggestions. Report of the First National Conference on Career Education, sponsored by the Chamber of Commerce of the United States, February 28-March 1, 1973.

Approximately 240 of the nation's leading businessmen, educators, and labor leaders gathered in Washington, D.C. February 28-March 1, 1973, to participate in the First National Conference on Career Education sponsored by the Chamber of Commerce of the United States. As a part of this Conference, participants were placed in 20 small discussion groups to resolve a set of 10 basic questions centered on the role of the business-education-labor community in career education. Spirited discussion of each question took place. Both written and oral reports of these discussions were given. Because of the many concrete suggestions for action resulting from these reports, this handbook has been prepared as a means of summarizing and disseminating these action suggestions.

Career education: Papers presented at the 1972 annual meeting of the American Educational Research Association, Chicago, April 1972. (ED 062 539)
EDRS Price MF-$0.65 HC-$3.29

Three of the papers in this collection present the separate models--school based, employer based, and home-community based. Titles of the five papers are: (1) "Facts and Fantasies of Career Education" by Gordon I. Swanson, (2) "Strategies for Implementing Career Education: A School Based Model" by Aaron J. Miller, (3) "Employer Based Career Education (EBCE)--A Model Developed at the Far West

Laboratory for Education; Research and Development" by Bela H. Banathy and Robert M. Peterson, (4) "The Home-Community Based Model (Model Three) of the U.S. Office of Education's Career Education R & D Program--A Synopsis" by Cornelius F. Butler, and (5) "A Summary of a Rationale for Education for Work" by Jerome Moss, Jr., Brandon Smith, and George Copa. Two points covered in the speeches that may be of special interest to program planners are the basic career education elements and the career education curriculum model. (RIE)

Chipley, D.R. and Wootoon, L.R. Career development in the elementary school: A practical schema, 1970. (ED 073 320)
EDRS Price MF-$0.65 HC-$3.29

The purpose of this paper is to call attention to the need for offering a vital program of career development education during the formative years of schooling and to describe a practical schema for building such a program in elementary schools. Many elementary educators lack the knowledge, attitudes, and skills needed to make career education a concrete reality in local schools. To provide guidelines for educators in developing career education curriculums, a schema was devised and articulated by administrators and teachers who took part in two career development institutes sponsored by the University of Georgia during the summer of 1970. This schema arranged key questions, concepts, and procedures in a systematic framework for dissemination to elementary school faculties. The following seven major categories were proposed: (1) goals, (2) organizational elements, (3) student needs, (4) instructional units, (5) correlation patterns, (6) resource materials, and (7) evaluative criteria. As an instrument for involving local educators in an ongoing process of developing programs and units in career education, this proposed schema should guide them in constructing more relevant patterns of elementary schooling. (RIE)

Combined resource papers from the National Conferences on Career Education--for deans of colleges of education, and for professors of educational administration, Columbus, Ohio, May 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

This publication contains papers presented during two 3-day conferences for 71 deans of Colleges of Education

and 134 professors of educational administration, both of which focused on orienting selected educational leadership personnel to the implications of preparing educational personnel with a career education program focus. Presentations were: (1) "Implications for Career Education of Research and Theory on Career Development" by S.H. Osipow, (2) "Nature and Characteristics of Emerging Career Education Curriculum" by Bruce Reinhart, (3) "The Emerging School-Based Comprehensive Career Education Model" by A.J. Miller, (4) "Personnel Development for Career Education" by L.J. Keller, (5) "Roles of Schools and Colleges of Education in Career Education" by K. Goldhammer, (6) "Problems in the Organization and Administration of Career Education Programs" by G. Smith, and (7) "Administrative Needs and Problems in the Installation of Career Education Programs" by W. Moore. (RIE)

Conferences on career education. Educational Testing Service, Princeton, N.J., May 1972. (ED 066 564)

Educational Testing Service sponsored two conferences for the purpose of further defining and assessing the impact of career education. Presentations indicating its widespread interest and importance made during the conference were: (1) "Introduction" by William W. Turnbull, (2) "Federal Initiatives and Career Education" by Peter P. Muirhead, (3) "The Nature of Career Education" by Roman C. Pucinski, (4) "1984 Revisited" by Paul Woodring, (5) "Implications of Career Education" by Harold Howe II, (6) "Developing a Career Education Program in Oregon" by Dale P. Parnell, (7) "Developing a Career Education Program in Dallas" by Nolan Estes, (8) "Career Education Dimensions of Community Colleges" by Norvel L. Smith, (9) "The Role of Organized Labor" by Gus Tyler, (10) "Women and Career Education" by M. Barbara Boyle, (11) "The Role of Business and Industry" by Douglas M. Knight, (12) "Meeting the Needs of Minorities" by Charles G. Hurst, Jr., and (13) "Evaluation in Career Education" by Charles F. Ward. (RIE)

Cooperative day of planning V. Report of the Joint Meeting of the State and National Advisory Councils on Vocational Education, Washington, D.C., November 1971. (ED 068 644)
EDRS Price MF-$0.65 HC-$3.29

The Fifth Joint Meeting of the State and National Advisory Councils on Vocational Education, held in Washington, D.C., on November 12-13, 1971, was attended by representatives of 47 states, the District of Columbia, American Samoa, and Guam. This report summarizes the resolutions and discussions on areas of mutual concern and presents texts of speeches delivered to meeting participants. The meeting focused on advisory council relationships and the various roles of federal agencies in regard to the career education concept. Attention was also given to pending legislation and questions of in-service training for state advisory council members. (RIE)

Crum, D.R. and Others. Vocational education for the 1970's: Conference Discussion Paper. U.S. Office of Education, Washington, D.C., 1971 (ED 053 301)
EDRS Price MF-$0.65 HC-$3.29

Vocational education in this decade must be conceptualized as life-long career development for every person who can profit from such a program. A framework for a career education system must be provided that will introduce the world of careers, provide exploration, guidance, counseling, provide specific skills, provide pre-technical and more technical exploration, and upgrade and retrain throughout adulthood. Objectives of vocational career development and the goals of vocational education are identified. Upon these, proposed elements of a career education model are stated. Some of these components are: (1) Career education will replace general education, (2) Priority will be given to special target groups, (3) Career education will begin in the elementary grades and continue through life, (4) Job placement and followup will be a continuous school function, and (5) Effective and continuous evaluation is required. To effect this system, the present vocational education delivery system must be modified. (RIE)

CUE conference on career education. Urban Review, 1972, 5, 21.

This conference, sponsored by the Center for Urban Education, dealt with a number of topics pertinent to urban education and employment via redesign of school

curriculums, utilization of employer-based models and other career education innovations.

Darcy, R.L. and Others. Workshop in developing guidelines for planning career development programs K-12 in Ohio, Columbus, June 1971. (ED 052 477)
EDRS Price MF-$0.65 HC-$3.29

The first of these six papers takes a systematic look at the range of current career guidance methods to determine which are most appropriate to which educational and age levels. A model for implementing career development programs at the senior high school level is presented in the second. General considerations regarding rate of change, approaches to change, obstacles to change and the implementation of change comprise the bulk of the third paper. In the fourth, the Development Career Guidance Project, aimed at helping inner-city youth become more aware of themselves and their possibilities in their world, is described. The fifth paper discusses, and presents an integrated model for identifying, organizing and using resources in a career development program. The final paper, an introduction to the Economics component of the proposed Ohio Career Development Program, K-12, elaborates its underlying rationale and identifies specific goals to be achieved through it and the overall program. (RIE)

Daugherty, R. and Others. Proceedings of the National Seminar for State Directors of Community-Junior Colleges, Columbus, Ohio, January 1972. (ED 062 520)
EDRS Price MF-$0.65 HC-$6.58

This 3-day seminar was specifically designed to acquaint state leaders with those trends in occupational education having direct and indirect implications for the post-secondary level and to provide a forum for identification and discussion of problems. Thus, 49 participants met and responded to presentations on the following topics: (1) "Improved Communications in State Administration of Vocational Education" by S.V. Martorana, (2) "Communications with the State Department of Vocational Education and Community-Junior Colleges" by J.E. Snyder, (3) "Secondary Schools and Community-Junior Colleges Vocational Education Articulation" by F.D. Lillie, (4) "Occupational

Education Program Articulation between the Community College and Baccalaureate Levels" by L.W. Bender, (5) "Articulation between the Proprietary School and Public Schools" by W. Goddard, (6) "Career Education and the Community-Junior College" by R. Worthington, (7) "Career Education--An Educational Concept" by K. Goldhammer, (8) "School Based Comprehensive Career Education Model" by B. Reinhart, (9) "Comprehensive Information System for Occupational Education" by P.V. Braden, (10) "Highway Safety" by R. Daugherty, and (11) "Occupational Information for Curriculum Design and Revision" by F. Pratzner and J. Joyner. (RIE)

Dexter, A.T. and Scott, L.G. An overview of the "Building for Career Education" conference, Knoxville, Tennessee, April 1972. (ED 068 730)
EDRS Price MF-$0.65 HC-$3.29

This publication contains four papers presented at three 1-day conferences. "Career Education: An Overview" by Gary R. Bice discusses the aims of career education, points to consider in developing career education programs, and areas of emphasis for the primary grades (K-4), middle grades (5-8), and high school grades (9-12). "Facilities for Vocational Education" by Ellis Hanson discusses the dimension of change seen in career education today and the impact of these changes on planning buildings and facilities to house career education programs. "Facilities for Education" by Lynn Raphael and Lenoir Rubin discusses the program components at the Shady Lane School, Pittsburgh, Pennsylvania. "Facilities for Early Childhood Education: Beginnings of Career Education" by Charles E. Trotter, Jr., is the text of a slide presentation illustrating several child care facilities. (RIE)

Education for career development: Symposium. Educational Leadership, 1972, 30(3), 203-205.

This special issue of the Journal of the Association for Supervision and Curriculum Development contains a plethora of articles dealing primarily with the theoretical justification for career development (i.e., "Career Education Works!"; "The School's Role

in Career Development"; "Career Development: Pandora's Box or Cornucopia?"). Contributors include: Sidney P. Marland, Robert Worthington, Lloyd W. Pull, Mary-Margaret Scobey and Edna Mitchell.

Ferver, J.C. Career education and the adult educator; Report of the adult education summer conference, University of Wisconsin, Madison, June 1972. Adult Leadership, 1972, 21(5), 165-8.

The participants of the Wisconsin conference came away from a series of lectures and discussions with two gnawing questions: "What distinguishes career education from education or human development?" and " . . . is not career education really what good vocational education has always been?" A number of pertinent questions by conference participants illustrate some of the recurring problems career educators are having in communicating their ideas to the rest of the educational world.

A guide to career education. Eau Claire, Wisconsin: District 1 Technical Institute, 1972. (ED 068 634)
EDRS Price MF-$0.65 HC-$6.58

This guide resulted from the Career Education Workshop conducted at District One Technical Institute, Eau Claire, Wisconsin in June 1972. It is intended to introduce the essential elements and concepts of career education and the world of work into post-secondary and adult education curriculums. The model guide, to be tested during the 1972-73 academic year, is flexible enough to be applicable to all of the programs offered at the District One Technical Institute and may also be used after evaluation in other post-secondary institutions. The eight elements and 16 concepts of career education are graphically presented in the model guide by charts and text. The section on activities related to the concepts could be used as a sample workbook. Included in the guide is a bibliography of resource materials on general vocational guidance and also on specific occupations. Other data from the workshop appear in the appendix. (RIE)

Gysbers, N.C. and Pritchard, D.H. (eds.) National conference on guidance, counseling, and placement in career development and educational-occupational decision making, proceedings. University of Missouri, Columbia, October 1969. (ED 041 143)
EDRS Price MF-$0.50 HC-$5.55

A conference on guidance, counseling, and placement services comprised the first step in developing programs to serve the five populations identified in the Vocational Education Amendments of 1968. Those populations are (1) high school youth, (2) those who have completed or discontinued their formal education and are preparing to enter the labor market, (3) those who have already entered the labor market but need to upgrade their skills or learn new ones, (4) those with special educational handicaps, and (5) those in post-secondary schools. Manuscripts are included for the following presentations: (1) "Career Guidance in the 1970's" by Felix C. Robb, (2) "What Do We Really Know about Career Development?" by Samuel H. Osipow, (3) "Restructuring of Educational Practices Related to Objectives for Guidance and Placement for Career Development" by L.G. Townsend, (4) "What Are the Personnel and Non-Personnel Resources Available and Needed to Meet the Vocational Guidance, Counseling, and Placement Needs of People" by Edwin L. Herr, (5) "Operational Goals, Policies, and Functions for Guidance as Seen from the Vocational Education Amendments of 1968" by Kenneth B. Hoyt. Summaries of task group discussions and a list of 151 participants are included. (RIE)

Hoeltzel, K.E. and Others. Papers presented at the workshop on the development of guidelines for planning career development programs K-12 in Ohio, Columbus, June 1971. (ED 053 313)
EDRS Price MF-$0.65 HC-$3.29

The purpose of this workshop, held June 8, 1971, was to develop guidelines for planning career development programs for Grades K-12. Seven persons from various universities throughout the United States presented papers. The presenters, their positions, and their topics were: (1) Kenneth E. Hoeltzel, Assistant Professor of Education at State University of New York, "Change and Introduction of Career Development Innovations in the School," (2) Kenneth B. Hoyt, Professor of Education at the University of Maryland,

"The World of Work: A Component in Career Development Programs," (3) Lorraine S. Hansen of the University of Minnesota, "Identifying, Organizing, and Using Resources in a Career Development Program," (4) George E. Leonard, Project Director at Wayne State University, "Career Guidance for Inner-City Youth in Action: The Developmental Career Guidance Project," (5) Harry N. Drier, Guidance Consultant for Wisconsin Public Schools, Implementing Career Development Programs in Senior High Schools," (6) Juliet V. Miller, University of Michigan, "Career Guidance Methods," and (7) Robert L. Darcy, Colorado State University, "Introduction to the Economics Component." (RIE)

In-service education in the public service. Sacramento: California Community Colleges, 1971. (ED 062 966)
EDRS Price MF-$0.65 HC-$3.29

This report describes a joint effort by the California Community Colleges and the University of California at Los Angeles in producing a conference entitled, "In-Service Education in the Public Service." The purposes of the conference were to encourage counselors to: (1) further their knowledge about public service career opportunities, (2) create and develop public career oriented programs, and (3) recommend new approaches on the part of public service organizations to attract talented youth. Papers presented in the report deal with the central themes of: (1) an overview of public service, (2) federal public service, (3) state and local public service, and (4) youth involvement in public service. (RIE)

Intermodal transportation careers: A guide for development of educational programs for transportation careers from grade ten through two years of post high school education. A report of a workshop. Washington, D.C.: Kirschner and Associates, 1972. (ED 072 287)

This report spells out the educational needs and criteria in the overall transportation systems field, offering guidelines for the educational community to help renew or develop careers in the changing transportation systems professions. Intended to allow for career mobility for those already employed in transportation, the comprehensive interdisciplinary guide-

lines cover the development, operation, and management of the transportation environment. The suggested programs are divided into three levels: (1) beginning-entry, (2) intermediate, and (3) semi-professional. Each core program has been made flexible enough to construct instructional units or modules of educational elements of specific skills, knowledge, and concepts, while simultaneously being geared toward vocational preparation. These core guidelines for curriculum development in intermodal transportation career education are applicable at the secondary and post-secondary levels. (RIE)

Related Reference:

Laine, O.H. Caveat emptor is not enough. Education, 1972, 92(4), 26-27.

K-12 career education guide. Sheboygan, Wisconsin: Lakeshore Technical Institute, 1971. (ED 061 429)
EDRS Price MF-$0.65 HC-$16.45

Directed toward reforming the scope of career education and initiating awareness and enthusiasm for continuous career education opportunities for all students in grades K-12, this curriculum guide describes the 16 basic career concepts and 205 general objectives taken from the Wisconsin State Career Curriculum Model and evaluated by teachers and counselors at the first Lakeshore Technical Institute. Grouped first by grade level (K-3, 4-6, 7-9, and 10-12) and then by subject area (communications, math, social studies, and vocational education), both grade level and subject matter rationales are divided into separate conceptual patterns to be introduced, developed, and emphasized. Behavioral objectives, classroom activities, lists of resources for activities, evaluation procedures, and suggested curriculum considerations, which were developed by Institute participants, accompany each concept. Models illustrating the scope and sequence of the 16 basic career development concepts through grades K-12, the three components of career development (self, work world, and career planning), and vertical and horizontal expansion of the concepts are included. (RIE)

Kennicott, P.C. and Schuelke, L.D. (eds.) Career communication: Directions for the seventies. Proceedings of the Speech Communication Association, Summer Conference, Chicago, July 1972. ED 068 994)
EDRS Price MF-$0.65 HC-$3.29

The 1972 summer conference of the Speech Communication Association explored the relationship between speech communication education and career preparation. The first section of the proceedings consists of addresses that describe and emphasize the career education programs sponsored by the U.S. Office of Education. The second section is a report of summaries of eight forums during which spokesmen from business, industry, and several professions discussed the role of speech communication in career fulfillment; each summary is accompanied by the report of the speech communication educator who presided over the forum. The third section consists of reports from implementation sessions in four areas: junior and senior high schools; community colleges; colleges and universities; and applied and basic research. The final section is focused on a summary of the deliberations and an assessment of their implications to the field of speech communication. (RIE).

Knopf, N.B. Personal growth and professional growth: Do the chicken and the egg both come first? Paper presented at the American Personnel and Guidance Association Meeting, Chicago, March 1972. (ED 066 694)
EDRS Price MF-$0.65 HC-$3.29

The title of this paper is perhaps amusing and provocative, but the emphasis is upon a serious matter. The paper is divided into three main sections. The first defines the educational process used in the Vocational Counseling Institute. It also discusses the problems of how personal growth and professional growth might be defined, and with the obvious implication of how difficult measurement is for these two concepts. The second part of the paper is more anecdotal, and describes some subjective impressions to, with, and about the trainees. It ends by quoting at length from a paper read at an American Personnel and Guidance Association convention, and asks a "burning" question. The primary implication was that the interviewers and counselors who participated in University training may actually be way ahead of their super-

visors and managers, and even administrators, in the process of becoming autonomous, fully-functioning persons. (RIE)

Lutz, R. Exemplary project region VIII workshop (Riverton, Wyoming, July 12-14, 1972). Cheyenne, Wyoming: Wyoming State Department of Education, 1972. (ED 073 273)
EDRS Price MF-$0.65 HC-$3.29

To discuss common problems and plan for their solution, this meeting of personnel from the Office of Education, the State Department of Education in Region VIII, and career Education Projects in the Rocky Mountain region was held. Specific goals included efforts to: (1) identify new approaches and alternatives in an effort to continue exemplary projects, (2) formulate new ways of improving the vertical articulation of the concept throughout the grades, and (3) identify new teaching strategies and interdisciplinary approaches to use in program implementation. Inputs from teachers and guidance counselors were used in resolving the prevalent issues. Alternatives in solving problems of financing future exemplary projects were set forth. The majority of the project participants were of the opinion that career education would continue in spite of funding problems because of its impact upon the teachers and students. (RIE)

Marland, S.P., Jr. Meeting our enemies: Career education and the humanities. Presentation before the Conference on English Education, Minneapolis, November 1972. (ED 073 329)
EDRS Price MF-$0.65 HC-$3.29

Career education, as viewed by the Division of Education in Washington, is essentially an instructional strategy aimed at improving educational outcomes by relating all teaching and learning activities to the concept of career development. Although teachers of the humanities may fear that career education is fundamentally anti-intellectual and rejects the humanist tradition, academic skills will not be supplanted by vocational preparation, but instead enriched by relating them to relevant vocational interest. Student motivation will be increased by preparing students either for immediate post-secondary employment or further career preparation. Of the 15

occupational clusters identified for career education curriculums, five are presently being developed at the high school level by leading curriculum specialists. Humanists can elaborate and refine career education as well as benefit from the utilitarian aspects of that concept. At its best, work is a humanity and has a central position in the fashioning of a satisfactory human life. (RIE)

Models for career education in Iowa: Elementary workshop report. Iowa Department of Public Instruction, August 1972.

This publication contains the program outline and major presentations given during the career education workshop for elementary teachers held in July 1971. The purpose of the workshop was to develop an understanding of the career education concept and how it could be implemented in elementary and junior high school systems. The content of this report provides a framework upon which this concept was developed by the workshop participants.

Needham, R. and Binnie, A. Improving occupational orientation programs for junior high school students in metropolitan areas. Final Report. Auburn, Washington, June 1971. (ED 055 242) EDRS Price MF-$0.65 HC-$9.87

Participants representing 18 western states and 37 cities attended an in-service institute designed to (1) identify trends, (2) examine current innovative programs, (3) look at roadblock programs, and (4) develop impact plans to cause improvement in occupational programs in the participants' home cities and states. Participants, including counselors, teachers, supervisors, administrators, community action workers, and teacher educators, were assigned to task forces to develop action plans. Consultants at the Institute made presentations concerning career development, and represented such areas as counseling and guidance, vocational education, manpower education, and state level administration. Also, a student panel selected from the Seattle School District brought the point of view of the junior high school to the Institute by identifying real student concern and feeling about the world of work. A followup report 6 months

later, indicated that plans of actions developed through the task forces were actually implemented in the participants' home districts. Analysis of all evaluation instruments indicated that Institute VIII was successful. The speeches by the various consultants are included in this final report, along with committee reports and a list of participants and group assignments. (RIE)

Occupational awareness in the urban middle school. A Vocational Guidance Institute, September 1969 to May 1970. New York: Ford Foundation, 1971. (ED 060 481)

These two compendia compile information on a vocational guidance institute, occupational awareness in the urban middle school, for the periods September 1969 to May 1970 and September 1970 to May 1971. The long range objectives of the program were to improve or develop: (1) Knowledge of the world of work in the metropolitan area; (2) Information about resources available through business and industry; e.g., speakers, field trips, materials; (3) Knowledge about the needs of urban middle school children for "Occupational Awareness"; (4) Attitudes of sensitivity toward specific needs of minority groups within the urban setting; (5) Specific techniques and materials for promoting occupational awareness in both the counseling and classroom settings; (6) Skill in evaluating the effectiveness or the procedures developed for promoting occupational awareness; and (7) more effective communication with university and business-industry personnel in order to identify the specific tasks needed by these three groups to promote optimum career development for the urban middle school child. (RIE)

Ohio's career continuum program. Career exploration program, grades 9-10 for the individual, school and community, and career choices. A workshop report. Cincinnati University, Ohio; Kent State University, Ohio; Toledo University, Ohio, 1971. (ED 065 729)
EDRS Price MF-$0.65 HC-$13.16

To develop an information system and model sampling for administrators of developmental career exploration programs in Grades 9 and 10, a series of summer workshops directed teachers, coordinators, and administrators to develop this curriculum guide for a student centered career education curriculum providing "hands-on" experiences. This preliminary project report describes a theoretical framework for career exploration, focusing on ten occupational clusters and six personal developmental areas. Developmental and behavioral objectives are correlated with student activities, while program objectives and methods of program implementation are detailed. Procedures for simulation activities in a variety of occupations are given, and a bibliography is included. Recommendations and implications of the workshops are presented, as well as a rationale for the career education continuum. A related document for Grades 7 and 8 is available as VT 016 019 (RIE, October 1972) and Grades K-6 as ED 062 575. (RIE)

Patten, B. and Owen, W.V. Summary report of the vocational guidance institute, Albuquerque, New Mexico, July 1969. (ED 040 420)
EDRS Price MF-$0.28 HC-$2.25

This report summarizes the activities of the 1969 Vocational Guidance Institute. Each activity lasted one week, the first being a language orientation week. Field activities filled the second week as participants toured plants, etc. During the third week each small group wrote and presented a paper on their experiences. This summary includes: (1) operational procedures of the institute; (2) a funds and operations flow chart; (3) a functional analysis; (4) a discussion of institute parties, values and relationships; (5) abstracts of student papers; (6) an evaluation and analysis on the institute; and (7) suggestions for future institutes. (RIE)

Perspectives on vocational guidance. Report of the Summer Workshop on Vocational Guidance, Big Rapids, Michigan, August 1969. (ED 036 842)
EDRS Price MF-$0.25 HC-$2.65

A workshop on vocational guidance was conducted to meet a continuing counselor-teacher-administrator

need for assistance in identifying and encouraging students in technically oriented careers. The following presentations are reported in their entirety: (1) Vocational Rehabilitation Program; (2) Students with Special Needs; (3) Basic Elements of Career Guidance; (4) Vocational Opportunities for the Technical Trained Individual in Conservation and Outdoor Education; and (5) Excerpts of a Discussion on Vocational Guidance between Trade-Technical Students and Workshop Participants. Also included is an evaluation of the workshop by the participants and the director and a summary of recommendations. (RIE)

Position papers on career education. Council of Chief State School Officers, Washington, D.C.; National Advisory Council on Vocational Education, Washington, D.C., 1973. (ED 073 307) EDRS Price MF-$0.65 HC-$3.29

This document contains position papers presented at a 3-day conference dealing with the implications of career education for minority groups. Texts of these papers are included: (1) "Career Education Improves the Self Concept" by D.R. Baylor, (2) "Career Education and Black Americans" by W.F. Brazziel, (3) "Career Education: Expanded Options for All Students" by L. Davenport, (4) "Career Education: From Whence It Came--Whither It Goeth" by J. Dixon, (5) "Career Education, Professional Preparation, and Minority Groups" by R. Johnson, (6) "Career Education: Perspectives of a Chicano Educator" by A.G. de los Santos, Jr., (7) "Values Have Consequences: Some 'Why' and 'How' Considerations of Current Thinking About Career Education" by C.E. Scruggs, (8) "Community Colleges and Career Education Relevant to the Needs of Minorities" by F. Shieh, (9) "Career Education: Quo Vadis" by M.P. Sikes, (10) "The Future of Work for Black Americans: The Role of Career Education" by C.E. Taylor, (11) "A New Career Educational Development Strategy for Rural Youth?--Greater Equity, Increased Priority, Model Approach, and Suggested Roles for Educational Institutions" by G.W. Taylor, and (12) "Is Career Education the Answer to the Educational and Vocational Needs of the Puerto Rican New Yorker?" by R.S. Valez. (RIE)

Price, C.R. New directions in the world of work. A Conference Report. Upjohn Institute for Employment Research, Kalamazoo, Michigan, March 1972. (ED 067 492)
EDRS Price MF-$0.65 HC-$3.29

A 3-day conference conducted by the W.E. Upjohn Institute for Employment Research with the support of the Ford Foundation explored a range of problems that blue collar workers have with their jobs and discussed new directions for industrial work which would decrease worker alienation and "humanize" the quality of work. The 42 conference participants represented management, unions, the Federal Government, universities, magazines, and the Ford Foundation. Some suggested approaches for alleviating job discontent and improving worker attitudes included job enrichment and redesign programs, organizational restructuring, and increasing opportunities for individual development to maximize productivity. Diverse viewpoints and interests are illustrated with quotations from conference discussions. (RIE)

Problems on counseling for careers. American College Testing Program, Iowa City, Iowa, 1969. (ED 042 178)

The first resource speaker, Willis Dugan of the American Personnel and Guidance Association, overviewed the current and changing needs in guidance programs. The demands which society now makes on young people were considered the point of departure from which continuously improving guidance programs should be developed. Six "responsible priorities" are delineated: (1) a clearer definition of counseling and its purpose; (2) definition of counselor duties and job functions; (3) greater professional competence; (4) an increase in the scope and effectiveness of communication; (5) development of research interests and activities; and (6) improvement of the counseling relationship. The second speaker, Dr. Joseph Shoben, Director of State University of New York's Center for Higher Education, spoke at length about the "generation gap" and the difficulties which obstruct effective dialogue between age groups, ethnic groups, etc. He concluded that new directions and finer sensitivities need to be developed among the helping professions if they are to become more relevant in a complex and turbulent world. A panel discussion concerning various

viewpoints about career needs and problems concludes this transcription of the conference proceedings. (RIE)

Proceedings of the conferences on career education. Princeton, New Jersey: Educational Testing Service, 1972.

Educational Testing Service felt that additional conferences on career education were desirable even though the topic had been talked about so much. There are three reasons: First, the idea had been described as a sweeping one that calls for nothing less than an educational revolution in this country. If so, it demands the most thorough review. Second, the discussions so far have served to bring to light misunderstandings, sharp disagreements, and controversies. And third, too often the discussions have been carried on from one or another special point of view, whereas the concept is intended to cut across many levels of education and has obvious implications for business and labor as well. Thus a group of speakers who would reflect backgrounds of outstanding leadership in all of those areas and who would be, at the same time, vitally concerned with career education were assembled for these conferences.

Proceedings fourth annual conference of guidance personnel in occupational education. New York State Education Department, Albany, May 1972. (ED 047 326)
EDRS Price MF-$0.65 HC-$3.29

Papers included in these proceedings are concerned with the following topics: (1) "What Do We Really Know About Career Development;" (2) "Manpower Policy and Vocational Education;" (3) "How Guidance Services Should Grow in Occupational Education;" (4) "Links;" (5) "The Role for the Vocational Educational Counselors for the Decade Ahead;" and (6) "Reactor's Report." The conference attempted to create a primitive and figurative map of what needs to be accomplished, who can accomplish it, and what strategies need to be developed in occupational education. It reaffirmed that nearly all Americans have needs for the facilitation of career development. In order to meet such needs one must purposely examine: (1) the outcomes which vocational guidance and placement are intended to facilitate; (2) the processes by which

persons attain such outcomes and factors which thwart or negate such development; (3) the preparation, competencies, and skills which must be possessed by those who facilitate the outcomes; (4) the potential contributions of different specialists; and (5) the technology or media which can strengthen the potential impact of these personnel. (RIE)

Proceedings of a national invitational conference on post-secondary career education for state directors of vocational education, community/junior colleges, adult and continuing education. New Orleans, January 1973.

The purpose of this conference, attended by more than 90 educational leaders, was to "provide a forum for presentations and discussions dealing with the issues and problems associated with the state level administration and articulation of post-secondary career education." The program consisted of four "modules": (1) Student needs for post-secondary career education, (2) Post-secondary program planning in a career education context, (3) Roles and relationships of state level agencies institutions, and (4) State-level articulation of post secondary career education.

Project inspire: Vocational guidance institute. West Hartford, Connecticut: Greater Hartford Chamber of Commerce, 1971.
(ED 052 472)
EDRS Price MF-$0.65 HC-$3.29

Two introductory speeches suggest the general social and interracial climate in the United States. It is against this backdrop that Project Inspire is described. Its purpose is the development of a vocational guidance component within the broader school curriculum. Its major objective is elevating the awareness level of students to the work world through the establishment of a comprehensive Human Resources Library. Specific institute materials included in this booklet are: (1) sample educational projects and techniques, including an educational simulation; (2) a listing of specific career orientation program objectives; (3) sample forms and letters for program participants; (4) a Connecticut task force

report on manpower needs; and (5) the results of an end-of-the-first week evaluation of institute participants' knowledge and feelings about minority youth, employment, and poverty. (RIE)

Raleigh-Durham area vocational guidance institute for counselors of minority youth, Raleigh, North Carolina, March 1972. (ED 060 494)
EDRS Price MF-$0.65 HC-$6.58

This institute was planned to assist public school counselors in their work with minority and deprived youth by providing information about employment conditions and opportunities in local geographical areas, by establishing regular communication lines between the schools and business and industry, and by furthering the counselors' knowledge of the attitudes which these youth have toward employment, education, their place in society, and the world beyond their experience. To achieve these purposes, the series of Institute sessions included speeches, panel discussions, and group meetings with key business and industry personnel, and guided tours of plant and business operations. Additional sessions were concerned with minority group youth and their problems in planning for future work and minority group workers and their experiences in the world of work. Further sessions were concerned with the experiences of educational and government personnel involved with minority groups, occupational orientations and placement. Detailed descriptions and evaluations of these sessions are included. (RIE)

Report of AVA task force on career education. Presentations at the Annual American Vocational Association Convention, Washington, D.C., December 1971. (ED 065 730)
EDRS Price MF-$0.65 HC-$3.29

The American Vocational Association (AVA) Task Force on Career Education met to formulate a recommended position for AVA on career education. Papers were presented, and six study groups made recommendations regarding the position that AVA should take on concepts and issues. Study group recommendations covered leadership, financing, the role of vocational education, and the role of AVA in communications. Presentations included in this report are: (1) "AVA Position--

A Time for Implementation," by Rupert Evans, (2) "Concepts in Career Education," by Gordon Swanson, and (3) "What Are the Issues in Career Education and How Shall They Be Resolved Through AVA?" by Kenneth Hoyt, Carl Lamar, and Garth Mangum. (RIE)

Robbins, W.A. Concerns and recommendations; a report of the colloquium on occupational counseling and guidance. State University of New York, Albany, January 1972. (ED 066 701)
EDRS Price MF-$0.65 HC-$3.29

The issues, problems, and changing needs of occupational guidance provided the focus for a special colloquium held at the State University of New York at Albany. The colloquium was conducted by the Two-Year College Student Development Center. For over two days the sixteen participants dealt with the issues and the implications for action suggested by these occupational guidance issues. The participants consisted of practitioners from the elementary and secondary schools, Boards of Cooperative Educational Services, New York State two-year colleges, counselor educators and other specialists. The group's goal was to review specific issues and problems facing occupational guidance and to identify steps which should be taken as a result of these. The need for colloquium is explained and a description of the basic issues and nature of discussions is presented. The main body of the report consists of a discussion of nine major concerns and their consequent recommendations. (RIE)

Robson, V. and Acord, D.L. Counselor awareness program for vocational education. Final report. Kanawha County Board of Education, Charleston, West Virginia, 1972. (ED 068 652)
EDRS Price MF-$0.65 HC-$6.58

Thirty-seven secondary counselors attended a 2-week intensive training program at Carver Career and Technical Education Center to update their knowledge of vocational education and of the world of work, to improve their counseling and guidance techniques, and to develop new or revised plans of occupational guidance and counseling for their respective schools. The 2-week training program was the first phase of the Counselor Awareness Program for Vocational Education. Implementation of the new or revised plans of occupational guidance and counseling in participants'

schools during the 1971-72 school term was the second phase. Important long-range goals were to help students improve their knowledge and understanding of vocational education and their ability to make wise career decisions. As part of the on-site experience, counselors observed vocational education teachers instructing students, heard presentations by the teachers of curricular activities performed in the vocational training areas and with the aptitudes students need for success, and participated in simulated work tasks. Each counselor participated in at least 15 of these sessions, known as Work Sample Exposures. Workshop methods included group guidance and individual counseling sessions, field trips, group discussions, reaction panels, and taped demonstrations of counseling sessions. (RIE)

The secretary's regional conferences on vocational education, Report of the Region X Conference, Seattle, April 1971.
(ED 056 166)
EDRS Price MF-$0.65 HC-$3.29

At this Region X conference called by the Secretary of Health, Education, and Welfare, 157 participants from Washington, Oregon, and Idaho met to discuss how career education needs of youth and adults and the needs of the economy are being met by schools in their communities, to determine the role that vocational education is playing in the process, and to identify methods of redirecting education in the 1970's in order to prepare secondary students for immediate employment or further education. The consensus of the 2-day conference was that schools must focus attention on the career needs of all students, not just those going to college. To accomplish this, schools must consider new approaches through revised and broadened curriculums and place considerably more emphasis on guidance and counseling services that aid the student in his career choice irrespective of his desired goal. The education process must be supplemented by and coordinated with other agencies which will provide a continuous process of career selection, preparation, and placement. (RIE)

The secretary's regional conferences on vocational education, Report of the Region IX Conference, San Mateo, California, March 1971.
(ED 056 167)
EDRS Price MF-$0.65 HC-$3.29

At this Region IX conference called by the Secretary of Health, Education, and Welfare, 170 participants from California, Arizona, Nevada, and Hawaii met to discuss how career education needs of youth and adults and the needs of the economy are being met by schools in their communities, to determine the role that vocational education is playing in the process, and to identify methods of redirecting education in the 1970's in order to prepare secondary students for immediate employment or further education. The consensus of the 2-day conference was that there needs to be a reassessment of the total education approach, resulting in a new image called career or occupational education which begins in the elementary grades and extends through the community college. Effective comprehensive planning involving schools, parents, industry, and local, state, and Federal representatives can gear the educational approach to the world of work. Broader application of cooperative and work experience education is needed with a better system of work orientation and exposure at elementary and secondary levels to meet the demands of business and industry. Summaries of conference activities are included. (RIE)

The secretary's regional conferences on vocational education, Report of the Region VIII Conference, Denver, April 1971. (ED 056 168)
EDRS Price MF-$0.65 HC-$3.29

At this Region VIII conference called by the Secretary of Health, Education, and Welfare, 150 participants from six western states met to discuss how career education needs of youth and adults and the needs of the economy are being met by schools in their communities, to determine the role that vocational education is playing in the process, and to identify methods of redirecting education in the 1970's in order to prepare students for immediate employment or further education. The consensus of the 2-day conference was that the present educational system is not adequately meeting the career educational needs of students, particularly for those who choose careers requiring education and training at less than the baccalaureate degree level. Regarding the integration of vocational-technical education with general or academically-oriented education, concern centered around the possibility that an integrated system at the elementary and secondary levels would be focused on orientation to work, vocational guidance and

exploration, but would fail to be specific enough to acquire an entry-level marketable skill and would delay specific preparation until postsecondary level. Summaries of conference activities are included.(RIE)

The secretary's regional conferences on vocational education, Report of a Region IV Conference, Atlanta, June 1971. (ED 056 230)
EDRS Price MF-$0.65 HC-$3.29

This Region IV conference called by the Secretary of Health, Education, and Welfare, brought together 280 participants from eight southern states to discuss how career education needs of youth and adults and the needs of the economy are being met, to determine the role of vocational education in the process, and to identify methods of redirecting education in the 1970's so that secondary students will be prepared for immediate employment or further education. Some highlights from group discussions during the 2-day conference are: (1) School administrators apparently do not desire to change curriculum to meet needs of industry, (2) Business and industry have vast resources that could be utilized by educators in the development of career education programs, (3) The cluster concept should be evaluated in light of present demands of the economy, with adjustments where necessary, (4) A closer relationship is needed between academic and vocational education, and (5) Teachers should be given an opportunity to improve through preservice and inservice teacher training. Summaries of other conference activities are included. (RIE)

The secretary's regional conferences on vocational education, Report of a Regional V Conference, Chicago, May 1971. (ED 056 232)

This Region V conference called by the Secretary of Health, Education and Welfare, brought together 249 participants from six midwestern states to discuss how career education of youth and adults and the needs of the economy are being met, to determine the role of vocational education in the process, and to identify methods of redirecting education in the 1970's so that secondary students will be prepared for immediate employment or further education. The general

consensus of the 2-day conference was that the present total educational system is inadequate but that vocational education has generally provided relevant and useful services for its students. The prepared career education concept was accepted with these reservations: (1) that elementary school children not be programed along specific occupational lines, (2) that content of specific vocational education not be "watered down," (3) that completion standards for school-industry programs be jointly established, (4) that career education not be dominated by general education or similar philosophies, and (5) that vocational educators participate in policy formation, program development, and implementation. (RIE)

The secretary's regional conferences on vocational education, Report of a Regional VI Conference, Dallas, April 1971. (ED 056 231)
EDRS Price MF-$0.65 HC-$3.29

This Region VI conference called by the Secretary of Health, Education, and Welfare, brought together 240 participants from New Mexico, Texas, Oklahoma, Arkansas and Louisiana to discuss how career education needs of youth and adults and the needs of the economy are being met, to determine the role of vocational education in the process, and to identify methods of redirecting education in the 1970's so that secondary students will be prepared for immediate employment or further education. Some major concerns expressed by the participants were: (1) Adequate and realistic occupational guidance and counseling, (2) Educational objectives that are more occupationally oriented, (3) Need for making and keeping programs relevant to current needs of students and the economy, (4) Need for updating and improving teacher education programs, (5) Utilizing school facilities for 12 months and lengthening the school day, and (6) Greater utilization of private schools in occupational training programs. Summaries of conference activities are included. (RIE)

The secretary's regional conferences on vocational education, Report of a Region I conference, Providence, Rhode Island, May 1971. (ED 056 233)
EDRS Price MF-$0.65 HC-$3.29

This Region I conference called by the Secretary of Health, Education, and Welfare, brought together 240 participants from six New England states to discuss how career education needs of youth and adults and the needs of the economy are being met, to determine the role of vocational education in the process, and to identify methods of redirecting education in the 1970's so that secondary students will be prepared for immediate employment or further education. The general consensus of the 2-day conference was that education is not meeting the needs of people, the needs for manpower, nor the needs of the economy. The concept of career education appears to be the most popular approach to the infusion of change in the educational system, but the many definitions of career education are creating communication barriers to the development of processes and are stimulating fears that the term will eventually water down all existing good practices that are proving effective in meeting a fragment of the needs. Additional recommendations and summaries of conference activities are included. (RIE)

The secretary's regional conferences on vocational education, Report of a Region VII Conference, Kansas City, Missouri, June 1971. (ED 056 236)
EDRS Price MF-$0.65 HC-$3.29

At this Region VII conference called by the Secretary of Health, Education, and Welfare, 161 participants from Iowa, Kansas, Missouri and Nebraska met to discuss how career education needs of youth and adults and the needs of the economy are being met, to determine the role of vocational education in the process, and to identify methods of redirecting education in the 1970's so that secondary students will be prepared for immediate employment or further education. Some recommendations from the 2-day conference were: (1) Vocational education and career development should be a continuous process from Grades K-14, (2) A much closer relationship is needed between industry and education in providing for effective transition from school to work, (3) All training for new and emerging industry should be developed cooperatively with the state economic development and vocational education officials, (4) Student loans for persons attending a vocational program should be available as

loans for persons attending college, and (5) Funding of the Vocational Education Act should be made 1 year in advance. (RIE)

The secretary's regional conferences on vocational education, Report of a Region II conference, New York, May 1971. (ED 056 228)
EDRS Price MF-$0.65 HC-$3.29

This Region II conference called by the Secretary of Health, Education, and Welfare, brought together 350 participants from New York, New Jersey, Puerto Rico, and the Virgin Islands to discuss how career education needs of youth and adults and the needs of the economy are being met, to determine the role of vocational education in the process, and to identify methods of redirecting education in the 1970's so that secondary students will be prepared for immediate employment or further education. Some concerns resulting from the 2-day conference were: (1) The educational system must be relevant to the needs of all persons in our society, (2) The educational system which presently carries an assortment of labels, should be one system, all leading to one goal titled career education, (3) The educational system cannot function satisfactorily until the professional educator seeks the cooperation, advice, and support of people from industry and labor, (4) The educational system must provide ways of teaching people the dignity of work, and (5) The educational system must be changed or modified, particularly in the early years. Summaries of conference activites are included. (RIE)

The secretary's regional conferences on vocational education, Report of a Region III Conference, Philadelphia, April 1971. (ED 056 229)
EDRS Price MF-$0.65 HC-$3.29

This Region III conference called by the Secretary of Health, Education, and Welfare, brought together 240 participants from six eastern states to discuss how career education needs of youth and adults and the needs of the economy are being met, determine the role of vocational education in the process, and identify methods of redirecting education in the 1970's so that secondary students are prepared for immediate employment or further education. The general

conclusion of the 2-day conference was that the present program of education does not meet the career education needs of youth or adults. Some recommendations were: (1) Career education should be adopted as a national program and with appropriate funding priorities, (2) Improved techniques should be developed for projecting manpower needs at the local, state, and regional levels, as a basis for program planning, (3) A partnership should be formed with education, the community, business, labor unions, and government to design the structure of career education, and (4) The guidance and counseling program needs to be improved by providing career guidance, job placement, and followup services. (RIE)

Worthington, R.M. and Hitt, H.L. Papers presented at the research coordinating unit directors conference, New Orleans, March 1972. (ED 062 558)
EDRS Price MF-$0.65 HC-$3.29

This publication contains two papers presented during a conference for research coordinating unit (RCU) directors. "The RCU's Role in Implementing the Career Education Concept" by R.M. Worthington, discusses several functions that can be accomplished by RCUs, including: (1) disseminating information about career education, (2) providing consultative services and technical assistance to local districts, (3) helping local districts design evaluation plans, (4) designing and sponsoring research and development projects to develop, test, and validate instructional materials and program components for career education, and (5) planning, coordinating, and managing the states' overall research, development, and pilot testing effort in career education. "Vocational Education: Our Common Opportunity" by H.L. Hitt, traces the changes that have occurred in higher public education since the 1800's, argues that a great majority of students are poorly prepared for the standard college curriculum, and suggests that colleges and universities can either restrict their enrollments to those who demonstrate academic preparation and promise or can restructure their curriculum to provide for the needs of all students. (RIE)

The world of work and welcome to it. St. Paul, Minnesota: Governor's Office of Economic Opportunity, 1970. (ED 060 421)
EDRS Price MF-$0.65 HC-$3.29

The agenda and three presentations of a program conducted for youth employed through the Neighborhood Youth Corps in 15 southwestern Minnesota counties are presented. The three speeches were "The World of Work and Self-Understanding" by Charles E. Ramsey, "An Employer's Perspective" by Steve Baloga, and "The Department of Manpower Services and You" by David Maday. (RIE)

Chapter IV

MEASURING VOCATIONAL BEHAVIOR

Research and practice related to the measurement of vocational behavior continues to expand dramatically. While the literature is still dominated by comparative research studies of specific variables such as interests, aptitudes and values, important new trends are observable. Greater concern is manifest for multivariate measurement, for studying women's vocational behavior, and for the development of self-administered instruments and their subsequent use in guidance and career exploration systems. Because of the large number of references identified for this chapter, the editors have tended to select for inclusion only those having immediate relevance for practice. Specific research studies of the type more commonly found in journals such as the Journal of Counseling Psychology, Journal of Vocational Behavior and the Vocational Guidance Quarterly were (with rare exception) deleted.

The assessment of career development, Iowa City, Iowa: American College Testing, 1973.

This new 16-score, 268 item test covers: occupational awareness, self awareness and career planning and decision-making. The test is machine scorable and can be administered in three separate 45-minute periods or one 125-minute continuous session. For use with students in grades 8 through 11.

Astin, H.S. Personal and environmental factors in career decisions of young women. Final report. Washington, D.C.: Bureau of Social Science Research, Inc., 1970. (ED 038 731)
EDRS Price MF-$0.50 HC-$4.85

This study explores the career development of women during the five year period after high school, examining the determinants of that development and presenting data which may provide a basis for better vocational guidance and a theory of occupational choice in women. The study employs longitudinal data

from the Project TALENT data bank and 17,009 women were analyzed in total. From the predictor variables employed, career choices of women after high school could be predicted with some degree of accuracy. Post high school experiences were the best determinants of career outcomes. Educational attainment and marital familial status best predicted whether women would choose careers in the professions or be housewives and office workers. Of the personal variables, scholastic aptitude and socioeconomic status as well as early career choices, were the best predictors. However, different clusters of characteristics were predictive of different outcomes. (RIE)

Biggers, J.L. Use of information in vocational decision-making. Vocational Guidance Quarterly, 1971, 19(3), 171-176.

This article describes a study which was conducted to seek tentative answers to the following questions: 1. What types of occupational information are used by students in decision-making? and 2. Is there a developmental trend in the use of information in decision-making? The study was also concerned with the testing of the relationship between age and experience and the utilization of occupational information. A sample of 294 boys from grades 4, 6, 8, 10 and 12 was utilized. An instrument (the Occupational Construct Inventory) was specially devised.

Boyd, J.L., Jr. and Shimberg, B. Directory of achievement tests for occupational education. Princeton, New Jersey: Educational Testing Service, 1971. (ED 052 239)
EDRS Price MF-$0.65 HC-$6.58

This directory was compiled to assist vocational teachers and researchers in locating tests in various occupational fields. Test data was gathered from publishers, directors of vocational programs, union officials, and members of the American Vocational Association. Selection of the instruments depended on their availability and standardization, although a few restricted instruments and non-standardized "item-banks" are included. Several "Trainer-Tester" devices and similar performance measures are also included. The tests are presented within eleven

broad fields of vocational education. Each test annotation includes title, author, publisher, cost, forms available, administration, and a brief description of the test items. A key word index is provided to facilitate test searches. (RIE)

Brown, F.G. Work values inventory; review. Measurement and Evaluation in Guidance, 1971, 4(3), 189-190.

Work Values Inventory: Grades 7-12 and adult; one form. 15 scales--Creativity, Management, Achievement, Surroundings, Supervisory Relations, Way of Life, Security, Associates, Esthetics, Prestige, Independence, Variety, Economic return, Altruism, Intellectual stimulation. The WVI was designed to assess these 15 "values of particular importance in determining an individual's satisfaction and success in his vocation." The author of this review found the test lacking supporting reliability and validity data, having no occupational normative data, and a clearly inadequate score range.

Buros, O.K. (ed.) The seventh mental measurements yearbook. New Jersey: The Gryphon Press, 1972, I and II.

This seventh MMY, like the earlier six yearbooks, "is designed to assist test users in education, psychology and industry to make more intelligent use of standardized tests of every description." The seventh MMY provides: descriptions and critical abstracts of tests used throughout the English-speaking world; extensive bibliographies of verified references on the construction, use and validity of specific tests; and fairly exhaustive listings of new and revised books on testing. Of particular interest is the section on vocational interests (pp. 1398-1481). The following instruments are identified according to their entry number in the seventh MMY.

Related References:

A.P.U. Occupational interests guide: Intermediate version. University of London Press Ltd. 1966-69. (1011)

California occupational preference survey. San Diego, California: Educational & Industrial Testing Service. 1966-70. (1012)

College interest inventory. Berea, Ohio: Personal Growth Press. 1967. (1014)

Connolly occupational interests questionnaire. Cambridge, England: Careers Research and Advisory Centre, 1970. (1015)

Crowley occupational interests blank. Cambridge, England: Careers Research and Advisory Centre, 1970. (1016)

The Factorial interest blank. Windsor, Berks, England: NFER Publishing Co., Ltd., 1967. (1018)

Hackman-Gaither vocational interest inventory: standard edition. Philadelphia: Psychological Service Center of Philadelphia, 1962-68. (1020)

Hall occupational orientation inventory. Chicago: Follett Educational Corporation, 1968, c 1965-68. (1021)

Kuder general interest survey. Chicago: Science Research Associates, Inc., 1934-70. (1024)

Kuder occupational interest survey. Chicago: Science Research Associates, Inc., 1956-70. (1025)

Minnesota vocational interest inventory. New York: Psychological Corporation, 1956-66. (1026)

Occupational interest survey (with pictures): Individual placement series. Dallas, Texas: Personnel Research Associates, 1966. (1028)

Ohio vocational interest survey. New York: Harcourt Brace Jovanovich, Inc., 1969-70. (1029)

Rating scales of vocational values, vocational interests and vocational aptitudes. San Diego: Educational and Industrial Testing Service, 1966. (1033)

Safran student's interest inventory. Don Mills, Ontario: Thomas Nelson & Sons (Canada Ltd., 1960-1969. (1035)

Strong vocational interest blank for men. Minneapolis: Testscor, Inc., 1969. (1036)

Strong vocational interest blank for women. Minneapolis: Testscor, Inc., 1969. (1037)

William, Lynde & Williams analysis of interest. Painesville, Ohio: William, Lynde & Williams, 1956-62. (1041)

Work values inventory. Boston: Houghton Mifflin Co., 1968-70. (1042)

Career planning program, Iowa City, Iowa: American College Testing, 1972.

The CPP is a "guidance-oriented system for collecting, analyzing, and reporting information related to an individual's career and educational decisions." It consists of three major sections: the Student Information Section, the Ability Measures and the Vocational Interest Profile. For students in grade 12 and post-high school.

Related Reference:

Hanson, G.R. and Cole, N.S. The career planning program--more than a test battery. Measurement and Evaluation in Guidance, 1972, 5(3), 415-419.

Clark, K.E. The Minnesota vocational interest inventory. Measurement and Evaluation in Guidance, 1972, 5(3), 408-410.

The development of psychometric instruments for use in counseling is much easier than is the education of counselors. Those who develop such devices for use in counseling should therefore accept the responsibility for incorporating into their scores and interpretive materials as much useful information as they can. Frequently such devices are interpreted only in terms of norms that have little meaning for the counselee. The Minnesota Vocational Interest Inventory provides scores that directly relate to many of the issues counselors and counselees discuss. The difficulty of interpreting the meaning of a score is reduced.

Comrey, A.L.; Backer, T.E. and Glaser, E.M. A sourcebook for mental health measures. Los Angeles: Human Interaction Research Institute, 1973.

This book is the result of a project funded by the National Institute of Mental Health to make information about psychological measures more readily accessible to potential users in the mental health field. It is a sourcebook of mental health-related psychological measures consisting of approximately 1,100 abstracts. Each of these abstracts provides selected identifying information followed by a brief description of that specific questionnaire, scale, inventory, or test. Following are instruments and page numbers for career development and vocational behavior related instruments contained within.

Clarke, W.V. Activity vector analysis. The construction of an industrial selection personality test. Journal of Psychology, 1956, 41, 378-394. (p. 431)

Crites, J.O. Attitude scale of the vocational development inventory. The maturity of vocational attitudes in adolescence. Washington, D.C.: American Personnel and Guidance Association, 1971. (p. 431)

Wolf, A. and Jackson, S.F. Attraction to work scale. Exploring means of overcoming the problem of transition from training to work. Springfield, Virginia: National Technical Information Service, 1971. (p. 431)

Wolf, A. and Jackson, S.F. Barriers to work scale. Exploring means of overcoming the problems of transition to work. Springfield, Virginia: National Technical Information Service, 1971. (p. 432)

Heim, A.W.; Watts, K.P. and Simmonds, V. Brook reaction test of interests. Cambridge, England: Psychological Laboratory, University of Cambridge, 1968. (p. 432)

Super, D.E.; Bohn, M.J.; Forrest, D.J.; Jordaan, J.-P.; Lindeman, R.H. and Thompson, A.S. Career development inventory, form I. New York: Columbia University, 1972. (p. 432)

Colenaty, C. Design perception cards: A numerically scored projective technique for use in business and industry. Perceptual and Motor Skills, 1966, 22(2), 595-600. (p. 433)

Woelfel, J. and Haller, A. The expectation elicitor. Significant others, the self-reflexive act and the attitude formation process. American Sociological Review, 1971, 36, 74-87. (p. 433)

Holland, J.L. and Nichols, R.C. The indecision scale. The development and validation of an indecision scale: The natural history of a problem in basic research. Journal of Counseling Psychology, 1964, 11(1), 27-34. (p. 434)

Walther, R.H. Job analysis and interest measurement. The psychological dimensions of work: A research approach through use of a self-report inventory. Atlanta: Educational Testing Service, 1964. (p. 434)

Robinson, E.L. and Grigg, A.E. A lower level job interest test. Journal of Industrial Psychology, 2(3), 66-70. (p. 434)

Zinay, G.H. and Senturia, A.G. The medical specialty preference inventory, development and applications. St. Louis: Department of Psychiatry, St. Louis University, 1971. (p. 435)

Gay, E.G.; Weiss, D.J.; Hendel, D.D.; Davis, R.V. and Lofquist, L.H. Minnesota importance questionnaire. Minneapolis: Industrial Relations Center, University of Minnesota, 1971. (p. 435)

Wilson, J.W. N W Inventory. Worcester, Maine: Nordli, Wilson Associates, 1970. (p. 436)

Haller, A.O. Occupational aspiration scale. East Lansing: Michigan Agricultural Experiment Station, Michigan State University, 1957. (p. 436)

Gribbons, W.D. and Lohnes, P.R. Readiness of career planning interview. Final report, OEG-1-7-062151-0471, October 1969. (p. 436)

Harren, V.A. Vocational decision-making checklist. Unpublished instrument, Southern Illinois University, 1970. (p. 437)

Goodwin, L. The work orientation questionnaire. A study of the work orientation of welfare recipients participating in the work incentive program. Final Report, U.S. Department of Labor Contract 51-09-69-02, August 1971. (p. 437)

Cole, N.S. On measuring the vocational interests of women. Iowa City, Iowa: American College Testing Program, 1972. (ED 060 821)
EDRS Price MF-$0.65 HC-$3.29

It is the purpose of this paper to consider the possibility of eliminating the pattern of women entering only traditionally women's vocations by examining the structure of women's interests in terms of inventory scales and occupational groups; to compare this structure with that found for men; and to suggest what inferences can be made from women's interests to the entire career spectrum. The results indicate that when women's interests are compared with those of other women, the resulting structure of interests is essentially the same as that found for men. In addition, when there are occupations that both men and women pursue, these occupations tend to fit in similar positions within the structure for both men and women. It is recommended that women be provided with this information so they may be aware of the more diverse career options open to them than commonly available. (RIE)

Cole, N.S. and Hanson, G.R. An analysis of the structure of vocational interests. Journal of Counseling Psychology, 1971, 18(5), 478-486.

The internal structural relationships of scales from the Strong Vocational Interest Blank, the Kuder Occupational Interest Survey, Holland's Vocational Preference Inventory, the Minnesota Vocational Interest Inventory, and the new American College Testing Program Vocational Interest Profile were compared. The configurations of the scales for all the inventories were found to be similar and to conform to the circular configurations of interest proposed by Roe and Holland. The common configuration of vocational interests was used to reconcile previous contradictory research results about the comparability of interest scores from various instruments and as a basis for counselor interpretation.

Crites, J.O. Vocational development and vocational education in adolescence. Final report. Iowa City, Iowa: Iowa University, 1969. (ED 058 451)
EDRS Price MF-$0.65 HC-$6.58

The research summarized in this report was stimulated by the need for an objective, standardized measure of vocational maturity which would provide an empirical referrent for the conceptual terms of vocational development. The instrument constructed for this purpose is the Vocational Development Inventory (VDI), consisting of the Competence Test designed to assess the cognitive components of vocational maturity, and the Attitude Scale designed to operationally define the conative elements in vocational maturity. The Attitude Scale is the only part of the VDO that has been developed and extensively investigated over the past 8 years. To further study the Attitude Scale, the Vocational Development Project (VDP) was established to implement a program of four different, but interrelated types of research, including survey, technique, theoretical, and applied. A data bank has been maintained by VDP to collate and analyze the research findings and to disseminate them periodically to facilitate further research. From the research conducted thus far, it can be concluded that the Attitude Scale is a widely applicable, reliable, and valid measure of vocational maturity and that it enters into relationships with a number of variables indicating that it operationally defines the concept of vocational maturity. (RIE)

Related References:

Crites, J.O. Career maturity inventory. New York: McGraw Hill, 1973.

Crites, J.O. Problems in the measurement of vocational maturity. Maryland University, College Park, 1970. (ED 066 666)
EDRS Price MF-$0.65 HC-$3.29

Crites, J.O. The maturity of vocational attitudes in adolescence. Washington, D.C.: American Personnel and Guidance Association, 1971. (ED 054 506)

Crites, J.O. Career maturity, Measurement in Education, 1973, 4(2), 1-7.

D'Costa, A.G. OVIS--A nonpredicting device. Measurement and Evaluation in Guidance, 1973, 5(3), 411-414.

For too long tests and measurement devices have been used mostly to predict future status and rarely to

help an individual learn about himself. To offset this, the Ohio Vocational Interest Survey (OVIS) was designed to serve primarily as an occupational exploration device for high school students. Because the OVIS scales represent the entire world of work in a systematic way, an individual can use his profile of scores to check out appropriate job clusters in terms of his aspirations and self-understanding. The OVIS profile presents measured interests alongside vocational plans and thus facilitates an individual learning process with which the counselor can assist. OVIS emphasizes a marriage between testing and counseling.

Erlick, A.C. Youth, education, and jobs. Intellect, 1972, 101, 10-11.

This article deals with the findings of the Purdue Opinion Panel's survey. In a Purdue University poll "security" was named by high school boys as the thing they wanted most from a job. High pay was second. High school boys' and girls' ratings of qualities they wanted from a job varied according to the educational levels of their fathers. The survey indicated that most youngsters plan to enter occupational groups traditional for their sex. The students tended to be people-oriented.

Feltham, D.W. The use of SSII in counseling. Paper presented at Canadian Guidance and Counseling Association Convention, Toronto, May-June 1971. (ED 054 469)
EDRS Price MF-$0.65 HC-$3.29

This paper attempts to relate the Safran Student Interest Inventory (SSII) to a decision-making model and show how it can be used as an important informational device in enabling students to become goal directed, assume more responsibility for being, and develop their confidence in becoming. The decision-making process involves working through the following steps: (1) selecting a goal; (2) collecting all pertinent information; (3) establishing and examining alternatives and possible consequences; (4) selecting an alternative after weighing the risks against the values involved; and (5) periodic evaluation and modification as required, to approach the desired goal. Input for the process of decision-making about one's

future educational career plans will require a knowledge of (1) your own interests and aptitudes; (2) the world of work; and (3) the relationships between your interests, aptitudes and requirements of the chosen careers. Tying together the decision-making process and input for the process is a strategy which attempts to minimize the risk of error. (RIE)

Flanagan, J.C. Some project talent findings regarding career planning. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1972. (ED 066 686) EDRS Price MF-$0.65 HC-$3.29

This paper presents some implications concerning career choice obtained from an analysis of the test and survey results for 400,000 high school students. These students were tested by Project TALENT in 1960, were followed up five years later, and were again surveyed in 1970 with selected parts of the TALENT test battery. These papers relate mainly to the increasing realism of choices, especially of the boys; the distinctive patterns of scores for career groups identified five years after graduation; and to the importance of earlier choices of at least the general nature of the career field. The paper reports new findings and relates these to some of the previously reported results. The findings are as follows: the unrealistic and unstable career choices characteristic of high school students throughout the country in 1960 are no longer typical of today's students; later career activities could have been planned on the basis of information available in high school; and if secondary education is to be relevant to students' needs and plans, it is essential that students be assisted in selecting their careers at an earlier time. (RIE)

Related Reference:

Flanagan, J.C. The first fifteen years of Project TALENT: Implications for career guidance. Vocational Guidance Quarterly, 1973, 22(1), 8-14.

Forrest, D.J. and Others. An objective multidimensional measure of vocational maturity: Development and validation. New York: Teachers College, Columbia University, 1972. (ED 064 486) EDRS Price MF-$0.65 HC-$3.29

Because existing experimental measures of vocational maturity were too narrow or difficult to administer and score, the Career Development Inventory (CDI) was developed to evaluate the effects of a computer-based vocational guidance system on the vocational development of high school students, and early research suggests that the CDI promises to be an important aid in research and counseling for vocational development. The CDI consists of three factor-analytic scales, including: (1) Planning Orientation, which represents the degree of the student's awareness toward planning and choice, (2) Resources for Exploration, which assesses the quality or soundness of individually used and potentially available resources, and (3) Information and Decision Making, which samples the amount of educational and occupational information and the use of the information for sound decisions. Test-retest reliabilities for the three scales over a short period of time were above .70, and reliabilities over a 6-month period were above .60, indicating that vocational maturity was a stable characteristic. Tentative results from content validity, criterion-related concurrent and predictive validity, and construct validity studies indicate that the CDI does measure important aspects of vocational maturity. Uses of the instrument for program evaluation, group assessment, and individual counseling are suggested. (RIE)

Geist, H. The Geist picture interest inventory. Beverly Hills, California: Western Psychological Services, 1964. (ED 059 234)

The purposes of this inventory are to: (1) assess quantitatively eleven male and twelve female general interest areas; (2) identify motivating forces behind occupational choice; (3) provide an interest inventory for working with those having limited verbal abilities; (4) provide possible additional information through projective uses; (5) further research. The inventory is appropriate for eighth grade through adult populations. Both individual and group administrations are possible. Interest choices are non-verbal; however, a check list of written statements is used to determine

motivating forces. Items consist of a triad of pictures with a question concerning examinee preferences under each. The examinee must circle his preference. When all preferences are circled, the examinee must check the motivation items in the check list which are applicable to each of his choices. There is no time limit. Inventories are scored by hand; a T-score conversion table is included in the manual. Test-retest reliability studies were done on populations with wide ranges of cultural and educational backgrounds. Validity was evaluated both by correlating distributions of Inventory scores with Kuder scores, and by an empirical study. Reliability and validity tables are included in the manual. (RIE)

Gilrain, J.B. Career education, 1973, a plan for evaluating student growth. New York: Box 53 Purdy Station, 1973.

This short (20 pages) monograph was completed in 1973 and should be an assist to those students and educators wishing to assess the effectiveness of Career Education programs. The monograph suggests specific variables, tests, research design and statistical analysis while citing recent supportive research and literature. It is part of a 1973 dissertation in the field of career education.

Goodson, S. Children talk about work. Personnel and Guidance Journal, 1970, 49(2), 131-136.

To provide background for an elementary-level program of occupational information, 180 children in grades 3-8 were individually interviewed to learn their concepts of the world of work. The children disclosed their knowledge, interests, and attitudes related to various occupations and reasons for working. Some children were well-informed and had specific vocational goals, while others were quite unaware of work. The data from the study were used to develop telecasts and other modes of presentation for occupational information.

Hales, L.W. and Fenner, B.J. Ohio Work Values Inventory. Athens, Ohio: Copyright 1973 by Hales and Fenner.

This guidance tool provides students with a self-administered and self-scored "Work Values Inventory." The "profile of work values" draws a correlation between sundry work value scores and such descriptors as: "helping others, making and handling things, having steady work, being in charge of others, . . . and using ideas and facts."

Harmon, L.W. Sexual bias in interest measurement. Measurement and Evaluation in Guidance, 1973, 5(4), 496-501.

Inventories can be biased in a number of ways. The bias inherent in different item pools and different scales for men and women is clear-cut. Developing scales on external criterion groups of employees segregated by sex may introduce sex differences into the scales unnecessarily, but no integrated criterion groups are available in occupations where only one sex is highly represented. In general, the most valid inventories have scales development on external criterion groups of men and/or women separately. Suggestions are given for minimizing sexual bias in interest testing.

Hohn, R.L. and Swartz, M.E. Development of attitudes toward others in young children: Final report. Washington, D.C.: Bureau of Research, Office of Education (DHEW), 1971. (ED 051 304) EDRS Price MF-$0.65 HC-$3.29

This study attempted to develop a valid instrument for the assessment of attitudes in kindergarten children and to evaluate two potential curriculum procedures for facilitating attitude growth. One experimental treatment evolved from role-theory and emphasized perceptual awareness and the ability to put oneself in the place of another; the other emphasized training in Piagetian operations such as conservation and spatial perspective. A third control treatment of traditional kindergarten activities was assessed. The major dependent variable was an attitude preference test requiring the children to choose among pictures of black and white people and to apply a positive or negative adjective

to the pictures. Subjects were also administered six Piagetian development tasks. Results indicate that kindergarten children possess marked, measurable, racial preferences and the significantly reduced racial attitude scores resulting from both role-playing and Piagetian training suggest the feasibility of educational intervention. Descriptions of the procedures and materials used in the Piaget Training Tasks and the Role Playing Tasks, directions for the Attitude Story Test and for the administration of Four Perspective Tasks are contained in the appendices. (RIE)

Hilton, T.L. A study of intellectual growth and vocational development. Final report. Princeton, New Jersey: Educational Testing Service, 1971. (ED 056 063)
EDRS Price MF-$0.65 HC-$16.45

This final report summarizes all phases of a completed longitudinal research program investigating intellectual growth and vocational development of students from fifth to twelfth grade. Student development over time was studied as an interaction between school, community and family, with each factor influencing career choice. Research objectives are outlined and the results are summarized with supportive data and analyses presented in the tables and appendices. (RIE)

Related References:

Hilton, T.L. Background and experience questionnaire: Grade 11. Princeton, New Jersey: Educational Testing Service, 1971. (ED 056 064)

Hilton, T.L. Community and school climate questionnaire. Princeton, New Jersey: Educational Testing Service, 1971. (ED 056 065)

Hilton, T.L. Adult experiences questionnaire. Princeton, New Jersey: Educational Testing Service, 1971. (ED 056 066)

Hilton, T.L. Vocational development interview schedule--Form A. Princeton, New Jersey: Educational Testing Service, 1971. (ED 056 099)

Hilton, T.L. Vocational development interview schedule--Form C. Princeton, New Jersey: Educational Testing Service, 1971. (ED 056 100)

Holland, J.L. The self-directed search, Palo Alto, California: Consulting Psychologists Press, 1971.

The SDS is a self-administered, self-scored and self-evaluated guidance instrument for helping individuals determine what occupations might be of interest to them. The SDS is organized to assess a person's resemblances to each of six personality types: Realistic, Investigative, Artistic, Social, Enterprising and Conventional. For individuals aged 15-50.

Related References:

Holland, J.L.; Sorensen, A.B.; Clark, J.P.; Nafziger, D.H. and Blum, Z.D. Applying an occupational classification to a representative sample of work histories. Baltimore: Johns Hopkins University, Center for the Study of Social Organization of Schools, 1971.

Holland, J.L. and Others. A guide to the self-directed career program: A practical and inexpensive vocational guidance system. Baltimore: Johns Hopkins University, Center for the Study of Social Organization of Schools, 1972.

Holland, J.L. Making vocational choices: A theory of careers. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Holland, J.L. A theory-ridden, computerless, impersonal vocational guidance system. Washington, D.C.: American Psychological Association, 1970.

Lewis, A.H. and Sedlacek, W.E. Socioeconomic level differences on Holland's self-directed search (SDS). Maryland University, College Park, Counseling Center, 1971. (ED 059 702)

Zener, T.B. and Schnuelle, L. An evaluation of the self-directed search: A guide to educational and vocational planning. Baltimore: Johns Hopkins University, Center for the Study of Social Organization of Schools, 1972. (ED 061 458) EDRS Price MF-$0.65 HC-$3.29

Horn, M. Woman's will to fail. Psychology Today, 1969, 3(6), 36+.

A study of "motive to avoid success" in women. "If she fails she is not living up to her own expectations, if she succeeds she is not living up to societal expectations about the female role." Motive to avoid

success is especially high in competitive situations. Achievement motivation is more complex in women because fighting obstacles is not considered ladylike.

Huth, C.M. Measuring women's interests: How useful? With comment by D.P. Campbell. Personnel and Guidance Journal, 1973, 51(8), 539-49.

Vocational interest inventories such as the SVIB are inherently appealing to women who seek career counseling. How useful they are to the counselor is another question. The author reviews studies employing the SVIB-W conducted during the past decade in order to answer such questions as: How reliable is the SVIB-W? How well does it differentiate interests? Can it effectively distinguish career commitments? Is it a good predictor? The author's conclusion is that information gained from this inventory is of minimal use in counseling women about careers.

Impellitteri, J.T. and Kapes, J.T. A longitudinal study of vocational development: Implications for vocational education and guidance. Pennsylvania State University, University Park Department of Vocational Education, 1971. (ED 055 237)
EDRS Price MF-$0.65 HC-$3.29

To identify the effects of the senior high school experience on the vocational development of youth, a 10-year longitudinal study was undertaken to trace the development of ninth graders from three Pennsylvania school districts. Included in the study are all Altoona students who finished Grade 9 in 1969, and all the Hayleton and Williamsport students who completed Grade 9 two years later. This first report describes the total 10-year study and provides a reference point for future publications resulting from the study. Implications for curriculum planning and guidance are discussed. Although primarily applicable to the three districts involved, the findings are generalizable to other school systems. (RIE)

Related References:

Impellitteri, J.T. and Kapes, J.T. The measurement of occupational values. Pennsylvania State University, University Park, Department of Vocational Education, 1971. (ED 059 357)
EDRS Price MF-$0.65 HC-3.29

Reardon, F. and Others. Development and evaluation of an occupational inventory. Journal of Educational Measurement, 1972, 9(2), 151-153.

Kapes, J.T. The relationship between selected characteristics of ninth grade boys and curriculum selection and success in tenth grade. Pennsylvania State University, University Park. Department of Vocational Education, 1971. (ED 055 238)
EDRS Price MF-$0.65 HC-$6.58

Jacobson, T.J. Interpreting the Ohio Vocational Interest Survey using visuals, 1972. (ED 066 665)
EDRS Price MF-$0.65 HC-$3.29

This is a presentation of a new method for interpreting the Ohio Vocational Interest Survey (OVIS) using visuals. The OVIS, administered in 43 high schools in San Diego County, California, was intended to complement the existing school guidance and counseling programs by providing the students with their measured and expressed occupational interests to assist them in career planning. Through the administration of these tests a program was devised consisting of a demonstration of the use of a prepared kit of materials available to assist counselors and teachers in interpreting the OVIS. The kit consists of masters for the production of overhead transparencies for a group presentation on the interpretation of the OVIS, a teacher-counselor's guide, and an index that relates OVIS scale scores to VIEW (Vital Information for Education and Work) occupations and Volume II of the Dictionary of Occupational Titles. Research indicating the effectiveness of group interpretation of OVIS results with prepared visuals are presented. The kit of materials is available by writing to OVIS Test Editor, Harcourt Brace Jovanovich, Inc., 757 Third Avenue, New York, New York 10017. (RIE)

Kinnane, J.F. Vocational motivation, Washington, D.C.: Center for Applied Research in the Apostolate, 1971.

This study is the third book of a triology. It is based on over 10 years of programmatic research at The Catholic University of America, combined with a review of empirical research from the general field of vocational psychology. This study faces the task of

exploring the theoretical foundations of vocational motivation, the complex nature of what constitutes success and satisfaction in life and work, with particular application to the priesthood and religious life.

Kuder occupational interest survey; review. Measurement and Evaluation in Guidance, 1971, 4(2), 122-125.

Although the Occupational Interest Survey is suggested for use by the manual as early as 10th grade no evidence is presented regarding the stability of interests at this age. There is little data on the reliability of individual scales and score profile. Combining data from occupational scales and educational major scales in the same analysis makes the test's validity look poorer. Various interest inventories do not agree with each other.

Kuder, F. Some principles of interest measurement. Educational and Psychological Measurement, 1970, 30(2), 205-226.

The two essential requirements of an interest inventory are that it be: valid with respect to the criterion of job satisfaction and usable in the counseling of people who may have quite limited backgrounds of training and experience. Kuder sets forth 12 principles of importance in the development and use of a vocational interest inventory.

Lake, D.G.; Miles, M.B. and Earle, R.B., Jr. (eds.) Measuring human behavior. New York: Teachers College Press, 1973.

This book aims at remedying the less-than-satisfactory state of affairs in relation to tools for measuring social functioning. In it are reviews of 84 instruments which receive critical attention as measuring tools. Also presented are reviews of 20 other existing compendia of instruments explaining what variables they cover, and what the adequacy of information presented in them is. Of particular interest are the following chapters: "Measures of Occupational Attitudes and Occupational Characteristics," "Sixth Mental Measurements Yearbook," by O.K. Buros, and "The Self Concept," by R.C. Wylie.

Measures of self concept: Grades K-12. Los Angeles, California: Instructional Objectives Exchange. n.d. (ED 069 681)

This collection of instructional objectives and related measuring instruments is the first of Instructional Objectives Exchange collections devoted to affective objectives. It concerns measures of self concepts. The collection is divided into five major sections. The discussion of the collection's organization is followed by a description of the development procedures. The third sections detail possible uses. The objectives themselves are listed according to grade ranges, that is primary (grades K-3), intermediate (grades 4-6), and secondary (grades 7-12). At the close of each objective a page reference refers to the concluding section which contains measuring devices, their rationales, and directions for administering and scoring them. Measures included are Self Appraisal Inventories at the primary, intermediate and secondary levels; Choose a Job Inventory; Parental Approval Index; The Class Play; Television Actors; What Would You Do? at both intermediate and secondary levels; Work Posting and Perceived Approval Situations. (RIE)

Mitchell, S.K. and Others. A vocational interest inventory based on Roe's interest areas. Seattle, Washington: Washington University, Bureau of Testing, 1971. (ED 054 209)
EDRS Price MF-$0.65 HC-$3.29

The construction and early validation of an ipsative, forced-choice vocational interest inventory (VII) to measure Roe's eight foci of occupational activity is detailed. Designed for counseling the broad range of high school students, the VII produced consistently interpretable mean profiles for groups of high school juniors having only tentative vocational orientations such as health sciences, engineering, business. Factor analytic studies revealed three dimensions. Service vs. Technology and Science vs. Business provided confirmation for the Roe-Holland hypothesis of a circular continuity of vocational interests. The third factor defined an Organizational (indoor) vs. Outdoor dimension. (RIE)

National assessment of educational progress. Objectives for career and occupational development. Denver, Colorado: Education Commission of the States, 1971. (ED 059 119)
EDRS Price MF-$0.65 HC-$3.29

Two organizations experienced in test construction, the American Institutes for Research (AIR) and Science Research Associates (SRA) assumed, under contract, the responsibility for formulating statements of career and occupational development (COD) objectives acceptable to scholars, educators, and lay citizens. Development of the COD objectives involved five years of preparation. The difficulties of defining terms, determining the scope of the objectives, phrasing the statements of objectives, and the methods of research undertaken by each contractor are described in the report. The final version of the objectives was accepted by National Assessment in July of 1970. COD is unique in that the objectives of the area are not the educational goals of any one school subject; they do not belong to a single discipline. The area includes many of the general achievements that result from general education and from guidance and counseling. The five major objectives are: (1) to prepare for making career decisions; (2) to improve career and occupational capabilities; (3) to possess skills that are generally useful in the world of work; (4) to practice effective work habits; and (5) to have positive attitudes about work. The major objectives are followed by subobjectives and further defined in terms of those objectives which should be attained by age 9, age 13, age 17, and (young) adult. The objectives will serve as the basis of exercises that will be administered at four age levels in 1972-73. (RIE)

Neeb, R.W. and Others. Human attribute requirements of work elements: Further development of the occupation analysis inventory. Raleigh, North Carolina: North Carolina State University, Center for Occupational Education, 1971. (ED 062 552)
EDRS Price MF-$0.65 HC-$6.58

As part of a research framework for a program to improve articulation between the educational and work domains of society, this report describes an attempt to link descriptions of work activities and conditions contained in an Occupation Analysis Inventory (OAI) with certain defined human attributes in the cognitive, affective, and psychomotor domains.

The study provides attribute-requirement estimates for the work elements in the OAI, derives basic work dimensions from the attribute-requirement profiles of the OAI work elements, and determines the stability of the resulting OAI dimensions. The application of this research can help to provide counselors with a solid framework for helping students make career decisions. (RIE)

Nelson, H.F. Project MINI-SCORE final report. Minneapolis, Minnesota: Minnesota University, Department of Trade and Industrial Education, 1972. (ED 068 638)
EDRS Price MF-$0.65 HC-$3.29

As an overview of a 6-year federally funded state program, Project MINI-SCORE's final report is intended to provide guidance personnel in Minnesota with occupational data useful for counseling high school students. Over 17,500 applicants to the full-time day programs offered in 24 Minnesota Area Vocational-Technical Schools were tested with a battery of five standardized vocational, personality, and aptitude tests and a personal data sheet in order to determine significant individual differences among those who are accepted into these schools, begin related employment, and achieve successful vocational adjustment, and those who do not. From these data bases, three instruments proved most useful for predicting success for vocational students: (1) the Minnesota Vocational Interest Inventory, (2) the Sixteen Personality Factor Questionnaire, and (3) the Minnesota Importance Questionnaire. Other success criteria were inconsistent, although the existence of significant differences among male and female groups and those successful in different occupations was documented from pre-enrollment test data. Numerous tables present the data. Supplementing this document are five comprehensive explanations of all statistical analyses, previously announced as ED 064 521-ED 064 525 and titled "Project MINI-SCORE Final Technical Reports." (RIE)

Related References:

Pucel, D.J. and Others. The ability of standardized test instruments to differentiate membership in different vocational-technical curricula. Project MINI-SCORE, final technical report. Minneapolis, Minnesota: Minnesota University, Department of

Trade and Industrial Education, 1972. (ED 064 521)
EDRS Price MF-$0.65 HC-$9.87

Pucel, D.J. and Nelson, H.F. Minnesota scholastic aptitude test and vocational development inventory. Training success norms and employment success norms. Project MINI-SCORE, final technical report. Minneapolis, Minnesota: Minnesota University, Department of Trade and Industrial Education, 1972. (ED 064 524)
EDRS Price MF-$0.65 HC-$3.29

Pucel, D.J. and Others. The ability of standardized test instruments to predict training success and employment success. Project MINI-SCORE, Final technical report. Minneapolis, Minnesota: Minnesota University, Department of Trade and Industrial Education, 1972. (ED 064 525)
EDRS Price MF-$0.65 HC-$6.58

Pucel, D.J. and Nelson, H.F. General aptitude test battery. Training success norms and employment success norms. Project MINI-SCORE, final technical report. Minneapolis, Minnesota: Minnesota University, Department of Trade and Industrial Education, 1972. (ED 064 523)
EDRS Price MF-$0.65 HC-$3.29

Pucel, D.J. and Nelson, H.F. Minnesota vocational interest inventory training success norms including supplement one. Minneapolis, Minnesota: Minnesota University, Department of Industrial Education, 1970. (ED 042 025)
EDRS Price MF-$0.25 HC-$2.35

Pucel, D.J. and Others. Minnesota vocational interest inventory. Training success norms and employment success norms. Project MINI-SCORE, final technical report. Minneapolis, Minnesota: Minnesota University, Department of Trade and Industrial Education, 1972. (ED 064 522)
EDRS Price MF-$0.65 HC-$3.29

O'Reilly, P.A. Evaluation of in-school success criteria for vocational-technical students. Pennsylvania State University, University Park, Department of Vocational Education, 1972. (ED 066 582)
EDRS Price MF-$0.65 HC-$3.29

To further understanding of the vocational development process, this study examined the success and investigated their relationship to selected student characteristic variables. The sample consisted of 109 vocational students for the 10th grade phase and 105

of the same students for the 11th grade phase. The dependent variables (measures of success) were grade point average (GPA) for Grades 10 and 11, shop grades for Grades 10 and 11, and Ohio Trade and Industrial Achievement Test (TAT) raw scores, while independent variables consisted of: (1) ability as measured by selected scales of the General Aptitude Test Battery (GATB), (2) occupational values as measured by four scales of the Occupational Values Inventory (OVI), and (3) vocational maturity as measured by the Vocational Development Inventory (VDI). Analysis by means of Pearson product moment correlations and multiple regression analysis yielded these findings: (1) Grade 11 GPA was found to be most predictable and OTAT least predictable of school success, (2) Verbal aptitude, numerical aptitude, vocational maturity, and value of salary seem to be the most useful of student characteristics used in predicting the measures of success, and (3) Grade 10 shop grade is the only success measure in which manipulative abilities are important predictors. Implications are discussed. (RIE)

Ostrom, S.R. Self appraisal and assessment structure. Los Altos, California: S.R. Ostrom, 1969.

This self-rated device which assists the individual in isolating abilities and interests is composed of twelve on-page scales composed of seven paragraphs. "Each paragraph describes a degree of performance in the field being rated." Individuals rate their own abilities and interests on the scales. For grades 9-Adult.

Parnicky, J.J. and Others. Standardization of the VISA (vocational interest and sophistication assessment) technique. American Journal of Mental Deficiency, 1971, 75(4), 442-448.

A sample of over 3,000 mildly retarded adolescents and young adults were administered a newly designed picture-inquiry instrument to measure vocational interest and knowledge. Subjects were drawn from institutions, schools, and workshops. Reliabilities and norms for both male and female forms of the test were substantially established. Data regarding validity and applicability, while more limited, were promising.

Prediger, D.J. Converting test data to counseling information. Iowa City, Iowa: American College Testing Program, 1971. (ED 055 103)
EDRS Price MF-$0.65 HC-$3.29

Information from tests, when considered in the context of decision theory, can play an important role in vocational development. This role is primarily one of stimulating and facilitating exploratory behavior. Objective procedures for converting test data into counseling information are discussed and illustrated with special attention being given to similarity scores and similarity score profiles. The similarity score profiles, when used in conjunction with success estimates, avoid many of the pitfalls inherent in Parsonian approaches to test interpretation. A computer-based system incorporating the above data-information conversion procedures was developed and field tested with potential vocational school students. Longitudinal validation analyses involving more than 1,500 students and 20 interest and aptitude measures provided the empirical base for the data-information conversion procedures. Similarity scores and success estimates were developed for each of the 12 vocational program areas in which the students enrolled. These reporting procedures were then field tested with an additional group of 900 students enrolled in 12 high schools. Illustrations of the similarity score reporting procedures and student reactions to them are provided. (RIE)

Related References:

Prediger, D.J. Converting test data to counseling information: System implementation in a vocational school. Iowa City, Iowa: American College Testing Program, 1971. (ED 050 161)
EDRS Price MF-$0.65 HC-$3.29

Prediger, D. Tests and developmental career guidance: the untried relationship. Measurement and Evaluation in Guidance, 1972, 5(3), 426-429.

Pucel, D.J. and Others. Vocational maturity and vocational training. Journal of Industrial Teacher Education, 1972, 9(3), 30-38.

The usefulness of the Vocational Development Inventory as a counseling aid and the effect of post-secondary vocational training on vocational maturity are examined.

Robinson, J.P. and Others. Measures of occupational attitudes and occupational characteristics. Appendix A to measures of political attitudes. Ann Arbor, Michigan: Michigan University, Institute for Social Research, 1971. (ED 059 922)

The purpose of this monograph is to provide researchers with a systematic review and evaluation of the major empirical measures relevant to the study of variables related to a person's occupation. Particular attention is focused on measurement scales, that is, series of attitude items that attempt to measure the same attitude content. The introductory chapter discusses the background of the project and the major criteria used in evaluating the 77 scales. Chapters 2-4 deal with reviews of research on job satisfaction. Historical perspective, cross-sectional studies, and predictability. Other chapters deal with the scales themselves: General Job Satisfaction Scales; Job Satisfaction for Particular Occupations; Satisfaction with Specific Job Features; Factors from some Multidimensional Analyses of Job Satisfaction; Concepts Related to Job Satisfaction; Occupational Values; Leadership Styles; Other Work-Relevant Attitudes; Vocational Interest Measures; Occupational Status Measures; Status Inconsistency; Some Conceptual and Methodological Considerations; Occupational Status; and Social Mobility. Chapter 18 summarizes the evidence of the previous four under the general heading of occupational similarity. Appendix B is ED 053 031; Measures of Political Attitudes is ED 053 032. (RIE)

Rose, H.A. and Elton, C.F. Ask him or test him? Vocational Guidance Quarterly, 1970, 19(1), 28-32.

The conflict between expressed vocational choice and measured vocational interest is explored in this study. The Strong Vocational Interest Blank scores and Holland's occupational classification system became the independent and dependent variables in a two stepwise multiple discriminant analysis of the vocational choices of 163 male secondary-level students. Findings "seem to indicate that greater use of expressed choice, as recommended by Holland and Lutz, may be justified . . ."

Shappell, D.L. and others. School motivation and occupational orientation. Vocational Guidance Quarterly, 1970, 19(2), 97-103.

The issues explored in this study include: "Do students who have a different motivation toward school also have a different orientation to the world of work?" and "What effect has the environment on the direction and degree of relationships between school motivation and occupational orientation?" The subjects, 186 randomly sampled ninth grade students from two selected schools, were administered Frymier's Junior Index of Motivation Scale and the Hall Occupational Orientation Inventory. The study indicates that students of low motivation have stronger concerns about many aspects of work than do their higher motivated counterparts.

Shimberg, B. Prediction and guidance, 1969. (ED 044 425) EDRS Price MF-$0.25 HC-$0.50

Problems in the application and misapplication of test scores are discussed. Tests have been used to achieve optimum use of resources rather than optimum development of the individual. Or, they have been used to predict a child's achievement rather than to identify his learning difficulties. This latter use would indicate when and where intervention in the child's educational experience might be successful in changing his predicted score. Predicted scores can also be changed by training individuals to take tests successfully. The use of test scores to measure abilities relevant to the skills required for a given occupation is considered. Finally, numerous suggestions are made which would aid counselors in fulfilling their responsibilities. These include providing the individual with information concerning agencies and organizations which could help him improve in areas where deficient, and with adequate and comprehensible data aiding him to make decisions that are correct for him, based on his values and goals and not merely on test scores and resulting predictions. The recent growth of vocational technical institutions provides an alternative to the pressures for conformity that result in so many students attending four-year colleges when they would prefer some other type of education. (RIE)

Sievert, N.W. The role of the self-concept in determining an adolescent's occupational choice. Journal of Industrial Teacher Education, 1972, 9(3), 47-53.

This study investigates various relationships between the perceived self and the perceived occupational concept as interred through self sorts by adolescents who have made an initial exploratory choice of a specific vocation in a vocational program. Specifically, the four questions answered in this study are: (1) What is the range of congruencies between the self concept and occupational identity for a group of occupational students selected at random from each of three grade levels, 10 through 12? (2) What is the difference between the observed congruencies of youngsters in 10th, 11th, and 12th grades? (3) Within each of grades 10 through 12, do students' shop achievements increase as the congruence between their perceived self-concepts and their perceived occupational concepts increases? (4) As the congruence between students' perceived self-concepts and perceived occupational concepts increases, do students' social interactions with the group increase?

Super, D.E.; Forrest, D.J.; Bohn, M.J., Jr.; Jordaan, J.P.; Lindeman, R.H. and Thompson, A.S. Career development inventory, form 1, preliminary manual for research and field trial. New York: Teachers College, 1972.

The Career Development Inventory is an objective, multifactor, self-administrating, paper-and-pencil inventory measuring the vocational maturity of adolescent boys and girls. It yields three scale scores, two of them attitudinal and one of them cognitive, plus a total score. The names of the scales are: Planning Orientation (attitudinal); and Information and Decision Making (cognitive). Questions are appropriate for junior and senior high school boys and girls.

Related Reference:

Forrest, D.J. The construction and validation of an objective measure of vocational maturity for adolescents. Unpublished doctoral dissertation. Teachers College, Columbia University, 1971.

Walsh, W.B. Vocational preference inventory; review. Journal of Educational Measurement, 1972, 9(2), 167-169.

To assess an individual's personality orientation Holland developed the VPI, based on the idea that preferences for occupations are expressions of personality. The VPI has moderate to high reliability. As an interest inventory the VPI does not suggest specific occupational alternatives. In general the validity studies support the meaning attributed to the scales.

Related Reference:

Stahmann, R.F. Holland vocational preference inventory. Journal of Counseling Psychology, 1972, 19(1), 85-86.

Tucker, W.H. Occupations questionnaire. Princeton, New Jersey: Educational Testing Service, 1972. (ED 062 379)

This questionnaire consists of pairs of occupations. The subject must select the one which is " . . . most looked up to." The 15 different occupations yield a paired comparison task with 105 choices.

Related Reference:

Tucker, W.H. An investigation of intransitive choice behavior. Princeton, New Jersey: Educational Testing Service, 1972. (ED 062 376)
EDRS Price MF-$0.65 HC-$6.58

Westbrook, B.W. Toward the validation of the construct of vocational maturity. Raleigh, North Carolina: North Carolina State University, Center for Occupational Education, 1971. (ED 057 255)
EDRS Price MF-$0.65 HC-$3.29

As with any new theory, it is necessary to validate the basic construct of vocational maturity. Once this is done, instruments to measure vocational maturity, or decision-making, can be evaluated. With this as an objective, this paper discusses some of the problems associated with measuring vocational maturity, such as identifying variables, methods of data collection, and item selection procedures. The selection and

definition of related vocational maturity variables is complicated by the lack of a well-defined taxonomy. Choice of methodology is difficult, since three approaches have been used in previous data gathering--the partially structured interview, the structured interview, and fixed alternative questions. The paper also examines the basic assumptions regarding vocational maturity as well as validation by internal and external evidence. Validation by internal evidence is discussed in terms of the four dimensions of Crites' model: (1) Consistency of Vocational Choice, (2) Wisdom of Vocational Choice, (3) Vocational Choice Competencies, and (4) Vocational Choice Attitudes. Validation by external evidence presents problems in that the existing data regarding external evidence is somewhat limited at the present time. (RIE)

Related References:

Westbrook, B.W., Parry-Hill, J.W., Jr. and Woodbury, R.W. The development of a measure of vocational maturity. Educational and Psychological Measurement, 1971, 31(2), 541-543.

Westbrook, B.W. and Cunningham, J.W. The development and application of vocational maturity measures. The Vocational Guidance Quarterly, 1970, 18(3), 187-193.

Westbrook, B.W. and Parry-Hill, J.W., Jr. The measurement of cognitive vocational maturity. Journal of Vocational Behavior, 1972, 2(1).

Westbrook, B.W. and Mastie, M.M. Three measures of vocational maturity: A beginning to know about. Measurement and Evaluation in Guidance, 1973, 6(1), 8-16.

Youth and careers in education. Washington, D.C.: National Center for Information on Careers in Education, 1971. (ED 057 015) EDRS Price MF-$0.65 HC-$6.58

This is a report on the findings of a qualitative attitude study intended as the first step in the development of programs to inform young people about career possibilities in education. It is divided into four parts and seven appendixes. Part 1 gives the summary and highlights of the major findings and conclusions. Part 2 gives, primarily in tabular form, the quantitative findings of the study based on

the results of the self-administered questionnaire. Part 3 gives a qualitative analysis of the findings by relating the quantitative data to the explanations of why the students felt as they did, based on the reasons they gave in personal depth interviews. Part 4 offers a professional analysis of the underlying attitudes of the students, based on all the data and analytical resources available. Appendix A looks at key research relating to youth, education and careers carried out during the past 20 years. The other appendixes provide a more detailed description of the project's design, rationale, and methodology; a look at the sample, the survey instruments used in carrying out the project, supplementary statistical tables, a list of references and source materials; and brief biographical information about the principal persons who comprised the research team.

Chapter V

GAMING AND SIMULATIONS

Games and simulations are more than just an instructional method. They are most frequently identified as media in their own right. They create a responsive environment for the development of group and individual behaviors. These approaches offer tremendous potential for providing career orientation and exploration, practice in decision-making and exercises in problem solving. Of primary significance is the fact that those approaches centralize the active role of the learner in the career development process. In addition, such experiences consistently result in more favorable attitudes and greater levels of interest and motivation.

Abt Associates Incorporated. 55 Wheeler Street, Cambridge, Massachusetts, 02138.

Abt Associates, Incorporated, founded in 1965, applies systems analysis and social science techniques to solve problems of industry, government, and education. The three education areas are Curriculum Development, Education Systems Analysis and Planning, and Manpower Development and Training Services. A complete list of games available may be obtained upon request. Some of the games and simulations designed for classroom use by Abt Associates, Incorporated are listed below:

Time, Money, Distance (Grades 3-6 and Remedial) The Transportation Game involves an entire class of 8-34 students in planning, arranging, and "taking" trips via different modes of passenger transportation. Cards coded by level of difficulty present players with specific transportation problems for which arrangements must be made with other students who act as agents for different travel modes--car, bus, railroad, airplane.

Settle or Strike (Grades 9-12 and Adult) is a role-play simulation of the collective bargaining process designed for the Communications Workers of America. 24-32 players in 6-8 role teams represent Union

Local 0001 and Lastik-Plastic Co., as they try to reach agreement on five contract issues: wages, union security, seniority, vacations, and contract duration.

Exploring Careers (Teachers of Grades 7-12 and Adult). The "Exploring Careers" booklet (soft cover, 20 pp.) contains a collection of "recipes" for home-made simulations and games which allow players to explore individually, as well as in groups of their peers, the basic information about a large number of possible careers. Both general and specific exercises are included: general exercises describe a broad field such as teaching, administration or engineering; specific exercises illustrate costs, benefits, and decision points in an individual life career such as that of an electrician, a nurse, or an insurance salesman. The booklet is designed to provide teachers and/or counselors with methods to develop their own materials--exercises that will inform and motivate interest in career choice with minimal supervision.

Baker, R.D. Test yourself for . . . science. Washington, D.C.: Scientific Manpower Commission, 1971. (ED 054 973)

This booklet of mathematical and scientific puzzles and games is designed to encourage the reader, interested in a science or mathematical career, to gain further information from knowledgeable people in his community, to read from a variety of sources, and to write to Scientific Manpower Corporation for its publication, "SEARCH: Science, Engineering and Related Career Hints." (RIE)

Boocock, S.S. Life career. School job catalog, instructor's manual, spinner and scoring booklet, and game materials. Wayne, New Jersey: Western Publishing Company, Inc., 1969. (ED 069 930)

This game, a simulation of the way the labor market, educational opportunities, and marriage and leisure patterns operate in our society, is designed for high school and college students in classroom situations, and has been extensively tested at that level. It can be used with any number of students, for any amount of time. Participants walk through a span of 8 years in the future as decision-makers for a fictitious person presented to them in the form of

a profile or case history. Each team of decision-makers is in competition with other teams working with the same profile. At various intervals, players are fed back the consequences of their decisions in the form of scores which are indicators of the relative satisfactions of the life they have planned. The game is designed to meet the four basic requirements for intelligent career decision-making: (1) a feeling for what the future will be like, (2) information on alternatives or opportunities, (3) the pattern of a life cycle, and (4) practice in decision-making. (RIE)

Coleman, J.S. et al. The Hopkins games program: Conclusion from seven years of research. Educational Researcher, 1973, 2(8), 3-7.

Since September 1966, the central question uniting and guiding the research of the Games Program at The Johns Hopkins University's Center for Social Organization of Schools has been: How do games create and influence learning? Natural games (i.e., sports and games that children play in their free time, unsupervised by adults) and instructional games (both simulation and non-simulation games) have been studied to determine how playing a game with a defined social organization or structure contributes to learning. The results of the programmatic inquiry are documented below. While they are not limited specifically to career education, the majority of them are generalizable to programs of career education and guidance.

Related References:

Coleman, J.S. Simulation games and social theory. 1967, 36 pp. (ED 017 237)

Boocock, S.S., Schild, E.O., and Stoll, C. Simulation games and control beliefs. 1967, 131 pp. (ED 016 736)

Coleman, J.S. Games as vehicles for social theory. 1968, 20 pp. (ED 023-145)

Stoll, C.S. Player characteristics and strategy in a parent-child simulation game. 1968, 46 pp.

Inbar, M. and Stoll, C.S. Autotelic behavior in socialization. 1969, 25 pp. (ED 028 465)

Stoll, C.S., Inbar, M. and Fennessey, J. Game experience and socialization--an exploratory study of sex differences. 1968, 20 pp. (ED 028 465)

Stoll, C.S., Inbar, M., and Fennessey, J. Socialization and games: An exploratory study of race differences. 1968, 23 pp. (ED 028 464)

McFarlane, P.T. Pilot studies of role behavior in a parent-child simulation game. 1969, 30 pp. (ED 027 593)

Cohen, K.C. The effects of two simulation games on the opinions and attitudes of selected sixth, seventh, and eighth grade students. 1969, 19 pp. (ED 031 766)

Harry, L. Using simulation games in the classroom. 1969, 15 pp. (ED 031 767)

Karweit, N. and Livingston, S.A. Group versus individual performance and learning in a computer game: An exploratory study. 1969, 24 pp. (ED 032 789)

Livingston, S.A. Simulation games and attitude change: Attitudes toward the poor (Questionnaire study 1). 1970, 14 pp. (ED 039 151)

Livingston, S.A. Simulation games as advance organizers in the learning of social science materials: Experiments 1-3. 1970, 17 pp. (ED 039 156)

Cohen, K.C. Effects of the consumer game on learning and attitudes of selected seventh grade students in a target-area school. 1970, 8 pp. (ED 038 733)

Anderson, C.R. Measuring behavioral learning: A study in consumer credit. 1970, 45 pp. (ED 039 607)

Entwisle, D.R.; Grafstein, D.; Kervin, J.; and Rivkin, M. Giant steps: A game to enhance semantic development of verbs. 1970, 35 pp. (ED 042 595)

Schild, G. The influence of games on school achievement, abilities and attitudes. 1971, 18 pp.

Lingston, S.A. Two types of learning in a business simulation. 1971, 17 pp. (052 392)

Kidder, S.J. Emotional arousal and attitude change during simulation games. 1971, 93 pp. (ED 054 513)

Kidder, S.J. Simulation games: Practical references, potential use, selected bibliography. 1971, 20 pp. (ED 054 486)

Livingston, S.A. Effects of a legislative simulation game on the political attitudes of junior high school students. 1971, 19 pp. (ED 055 005)

Edwards, K.J. The effects of ability, achievement, and number of plays on learning from a simulation game. 1971, 21 pp. (ED 055 309)

Kidder, S.J. and Guthrie, J.T. The training effects of a behavior modification game. 1971, 30 pp. (ED 057 613)

Livingston, S.A. Simulation games and attitudes towards the poor: Three questionnaire studies. 1971, 19 pp. (ED 057 612)

Edwards, K.J. Students' evaluation of a business simulation game as a learning experience. 1971, 35 pp. (ED 058 142)

Fennessey, G.M.; Livingston, S.A.; Edwards, K.J.; Kidder, S.J. and Nafziger, A.W. Simulation, gaming, and conventional instruction: An experimental comparison. 1972, 45 pp. (ED 062 303)

Livingston, S.A. and Kidder, S.J. Role identification and game structure: Effects on political attitudes. 1972, 20 pp. (ED 065 444)

Edwards, K.J., DeVries, D.L. and Snyder, J.P. Games and teams: A winning combination. 1972, 37 pp.

DeVries, D.L. and Edwards, K.J. Student teams and instructional games: Their effects on cross-race and cross-sex interaction. 1972, 25 pp. (ED 070 808)

Livingston, S.A. Simulation games and political attitudes: The importance of role identification and game structure. 1972, 27 pp. (ED 069 047)

DeVries, D.L. and Edwards, K.J. Learning games and student teams: Their effects on classroom processes. 1972, 35 pp. (ED 070 019)

Kidder, S.J. and Nafziger, A.W. (compilers). Proceedings of the National Gaming Council's eleventh annual symposium. 1972, 286 pp.

Livingston, S.A. The academic games program: A summary of research results (1967-1972). 1972, 35 pp. (ED 072 393)

Edwards, K.J. and DeVries, D.L. Learning games and student teams: Their effects on student attitudes and achievement. 1972, 25 pp. (ED 072 391)

Livingston, S.A. Simulation games in the classroom: How important is the post-game discussion? 1973, 15 pp.

Fennessey, G.M. Guidelines for writing the director's manual for a simulation game. 1973, 17 pp.

Kidder, S.J.; Horowicz, R.E. and Kiselewich, G.M. An instructional model for the use of simulation games in the classroom. 1973, 16 pp.

Livingston, S.A.; Fennessey, G.M.; Coleman, J.S.; Edwards, K.J. and Kidder, S.J. The Hopkins Games Program: Final report on seven years of research, 1973, 28 pp.

Glazier, R. How to design educational games. Cambridge, Massachusetts: Abt Associates (Fourth Edition, 1973).

The advantage of gaining "true-to-life" experience in a game is that the player learns the consequences of activities and situations without actually suffering them. This publication is a succinct introduction to the theory, objectives and effectiveness of games; elements, typology and principles of game design; and a bibliography of published games and sources.

Goldman, R.M. "Roles people play" kit. Orinda, California: Diablo Valley Education Project; Concord, California: Mount Diablo Unified School District; Morage, California: Saint Mary's College, 1971. (ED 059 930)
EDRS Price MF-$0.65 HC-$3.29

The draft materials in this kit were prepared for classroom experimentation employing the role instruction approach to social studies and occupational instruction at elementary and secondary levels. A major aspect of socialization consists of the roles

one learns. Role instruction is designed to transmit role information in a deliberate and systematic manner so that each student can: (a) become fully aware of the role learning in his daily experiences; (b) grasp the implications of different roles for his social and occupational life; and (c) comprehend the impact of role-learning on the development of his own personality. The kit contains cards and booklets (the latter not yet available) that may be used by both students and teachers. Cards include: (1) basic concept cards, explaining the mearning of role, personality, and position; (2) role information cards, describing the various kinds of information units to introduce the student to real-life manifestations of role behavior, the multiplicity of roles learned by each person, etc.; (4) several role-study exercises; (5) selected role scripts (auto mechanic, mother, world citizen, soldier, and others); and (6) a guide to evaluation of student attitudes toward specific roles. Finally, ways to apply several of these role exercises to war/peace situations are suggested. (RIE)

Goodman, F.L. Gaming and simulation. Chapter 29 in Travers, R.M.W. (ed.) Second Handbook of Research on Teaching. Chicago: Rand McNally, 1973.

A discussion of the basic definitions of games, the dynamics of gaming exercizes, and research problems. "One of the most hopeful avenues of gaming research lies in the direction of getting people to understand what they have learned when they lose and to be able to distinguish between the advantages and disadvantages of learning on the one hand, and the advantages and disadvantages of winning or losing on the other."

Hamilton, J.A. and Krumboltz, J.D. Simulated work experience: How realistic should it be? Personnel and Guidance Journal, 1969, 48(1), 39-44.

One hundred 10th grade non-college-bound students were randomly assigned to receive two alternative types of materials: (a) experimental-an Electronic Technician Kit which required students to use an actual ammeter in solving problems representative

of that occupation; and (b) Control-a kit virtually identical with the experimental treatment except that no meter was provided. The experimental subjects reported more enjoyment, wanted more information about an electronic technician career, wrote more questions about careers, and signed up to take more additional career kits than did the control subjects.

Hanson, G.A. and Parker, E.C. Using simulation training materials to individualize instruction. In A.H. Krebs (ed.) The individual and his education. Washington, D.C.: American Vocational Association, 1972, 189-120.

Our greatest obligation to our children is to prepare them to understand and to deal effectively with the world in which they will live and not the world we have known or the world we would prefer to have. Simulation is a teaching process that meets this challenge through individualized instruction and reality. The purpose of this chapter is to explain the steps of simulation in detail with emphasis on those individualized characteristics.

Johnson, R.G. Job simulations to promote vocational interests. Vocational Guidance Quarterly, 1971, 20(4), 25-30.

In this study simulated problems in X-ray and medical laboratory technology were tested with a group of 9th and 11th grade girls to determine whether or not the simulations would generate interest in learning more about these two health service occupations. The results of this study tend to substantiate previous findings which indicate that specific vocational interests can be generated through simulated vocational experiences. It failed to find any overall differences between job simulations in specific occupations and a general approach to career planning in motivating interest in learning more about vocations in general.

Johnson, R.G. Occupational simulations in career development. In Law, G.F. (ed.) Contemporary concepts in vocational education. Washington, D.C.: American Vocational Association, 1971, 235-240.

Simulation permits a variety of vocational experiences to be brought into the classroom. Any one of these experiences is capable of igniting a spark of interest which subsequent experience might strengthen and which eventually might lead to a career choice. The goal should not be to recruit students to a given occupation but to have them see the array of the opportunities open to them, to have them explore areas which might otherwise be overlooked and to increase the alternatives from which the individual can make his own career choices.

Johnson, R.H. and Euler, D.E. Effect of the life career game on learning and retention of education-occupational information. School Counselor, 1972, 19(1), 155-159.

The Life Career Game is a simulation game which focuses on the "role of decision-making in the lives of individuals." This article reports the results of an experimental study of the effects of the Life Career Game on students' learning of factual occupational information. It was found that although students playing the game did not find it interesting, and although they learned no more than did students in teacher-taught groups, they did retain well what they learned.

Johnson, R.H. and Myrick, R.D. MOLD: A new approach to career decision-making. Vocational Guidance Quarterly, 1972, 21(1), 48-52.

A career decision-making simulation was experimentally tested in a middle school, resulting in significant learning of educational information as well as high student motivation and interest.

Klietsch, R.G. An introduction to learning games and instructional simulations. St. Paul, Minnesota: Instructional Simulations, Inc., 1969.

As a growing number of educators and classroom teachers become aware of the possibilities of using simulations and learning games as a regular part of the curriculum or as instructional/learning units, there is an equal number of questions of procedural,

educational, environmental and general application nature that should be treated. This publication is a very comprehensive treatment of such considerations.

Related references:

System 1: A classification and concept development game, 1965.

Getting started with learning games, Position Paper #78, 1971, 8 pp.

Curriculum and behavior-based learning systems . . . Where do learning games, simulations and didactics fit? Position Paper #87, 1969, 4 pp.

Educational simulations versus "active case studies." Position Paper #89, 1970, 4 pp.

A taxonomy of behavior-based learning systems. Position Paper #90, 1970, 20 pp.

What are educational simulations? Position Paper #106B, 1970, 6 pp.

What are learning games? Position Paper #106C, 1970, 6 pp.

What are "mood-modifiers" in behavior-based learning. Position Paper #106G, 1970, 4 pp.

What are active case studies? Position Paper #106D, 1970, 6 pp.

What is operational gaming? Position Paper, #106E, 1970. 5 pp.

What are creative dramatics? Position Paper #106F, 1971, 8 pp.

Evaluating learning games and simulation. Position Paper #133, 1970, 6 pp.

Subject-matter and involvement learning: Anthropology. Position Paper #190-B, 1972, 4 pp.

Theory of social simulation. Position Paper #167, 1972, 12 pp.

Developing an "involvement learning" center. Position Paper #170, 1972, 16 pp.

Klietsch, R.G.; Wiegman, F.B. and Powell, J.R. Directory of educational simulations, learning games and didactic units. Copyright 1969 by the authors.

This Directory was created from necessity. The development of educational materials in this field has grown so rapidly that it has become virtually impossible for any one person or group to monitor the field, much less the educational benefit of these materials. In 1968, it was deemed imperative by the Macalester College Simulation Center to search and describe this growing field. This Center sought then, as it does today, to serve as a clearinghouse for these materials insofar as they are related to educational application, classroom use, and learning system benefit. Simulation as an art and craft extends far beyond the education field. Only recently have the techniques of simulation been applied to instructional/learning problems in the classroom. The Center seeks to provide a means for communicating its analysis of these techniques to users and practitioners in the field of educational simulation, gaming and didactics.

Related Reference:

Klietsch, R.G. and Dodge, D. Classroom applications of instructional simulation and learning games (June 9, 1969 - July 3, 1969). Director's report. St. Paul, Minnesota: Macalester College, 1969. (ED 032 263)
EDRS Price MF-$0.25 HC-$1.25

Simulation in vocational-technical education. American Vocational Journal, 1970, 45(6), 20-39.

Special issue of the AVJ which includes the following articles: "What is simulation" (Leslie E. This), "Simulation: Can it benefit vocational education?" (William A. McClelland), "Simulation in leadership training" (Richard F. Meckley), "Crimson company provides the finishing touch: Story of a simulated office" (Mavis C. Sparks and Betty Hammond), "Simulation techniques in career development" (Richard G. Johnson), "It's an old game in vocational agriculture" (Edgar Persons), "Simulating the corporate structure: A learning game for industrial education" (Harold S. Resnick).

Special papers on career education. Trenton, New Jersey: New Jersey State Department of Education, Division of Vocational Education, n.d. (ED 069 892)
EDRS Price MF-$0.65 HC-$3.29

This document contains several short papers which cover various aspects of career education. The need for and elements of career development programs are discussed by R.M. Worthington in "Career Development for All," while G. Law, Jr. defines simulations, discusses their advantages, and presents examples in "Simulations and Career Education." "Answers to Five Basic Questions About Career Education" by P. Doherty is intended to provide a brief orientation for teachers and administrators, and "Computerized Career Information" by G. Law, Jr. provides information for educators considering the use of such systems. The facts behind the nationwide movement for schools to accept accountability for placement of all students in employment and/or continuing education is presented in "Why Career Education? The Facts" by L.A. Forsythe and E.G. York, while "Placement: The Ultimate Test of a School's Commitment to its Students" by W. Kaskow briefly explains a job placement program. The shape of a career exploration program for young teens is described in "7th, 8th and 9th Grade Career Exploration" by T.W. Gambino, and a bibliography of periodicals is provided by P.R. Walsh in "Periodicals Helpful to Career Education." "Apprenticeship Training and Career Education" by W. Wenzel discusses the relationship of apprenticeship training to career education. "Highlights of the Invitational Conference on Career Development" concerns a conference held on August 2, 1971, to acquaint New Jersey educators with progress made in pilot comprehensive career development programs in Camden, New Brunswick, and Rahway. Four speeches and a summary of findings and recommendations are included. (RIE)

Twelker, P.A. and Layden, K. Educational simulation/gaming. Stanford University, California. ERIC Clearinghouse on Educational Media and Technology, 1972. (ED 064 955)
EDRS Price MF-$0.65 HC-$3.29

A simple introduction to the techniques of simulation and gaming is offered, and several simulation/gaming applications are differentiated--non-simulation games, planning exercises, interpersonal simulation

games, and large system simulation games. A chart compares various simulation/gaming applications for a large number of learning characteristics. An annotated bibliography lists both basic references and material for more experienced users of simulation/gaming. A directory gives the names and addresses for over 50 groups involved in a simulation/gaming and describes each group's status, activities, level, and focus. (RIE)

Chapter VI

RESEARCH AND DEVELOPMENT, EXEMPLARY PROGRAMS AND PROJECTS AND CAREER EDUCATION MODEL DEVELOPMENT

This chapter synthesizes the many State and Federally funded career education projects which have been initiated since Volume I was compiled. Because of the number of such projects, annotations are omitted if such information is contained in the primary reference. In all cases, more comprehensive information is readily available in the primary source.

A. Research and Development

Abstracts of Research and Development Projects in Career Education, Supported Under Section 131 (a) of Part C of the Vocational Education Amendments of 1968 (Public Law 90-576), June 1972. (ED 063 520) EDRS Price MF-$0.65 HC-$6.58

A booklet to provide overall background information on research and development projects in career education as well as an abstract of the activities being undertaken in each individual project is presented. Each of the 50 states, the District of Columbia, and the various territories of the United States is represented. The abstracts relate the different approaches which are being attempted by the staffs of the various projects in career education. (RIE) The following projects are described in this publication:

Alabama, Bishop, J.*
1. Phenix City Public School District, p. 10
2. Mobile County Public School District, p. 11

Alaska, Ridle, L.D.
3. Cordova Public Schools, p. 13

Arizona, Borcher, S.
4. The Mesa School System, p. 14

* State-Level Project Administrator, Director of local programs not provided.

Arkansas, Knight, G.
5. Magnolia Public Schools, p. 16

California, Peters, P.N.
6. Camino Union Elementary School District, p. 18
7. Covina Valley Unified School District, K-12, p. 19
8. Los Angeles City Unified School District, p. 20
9. Monterey Peninsula Unified School District, p. 21
10. Sacramento City Unified School District, p. 22
11. San Diego County Department of Education, p. 23
12. San Mateo County Board of Education, p. 24
13. Santa Barbara City Schools, Pre-K-14, p. 25

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14. Jefferson County Public School District, p. 27

Connecticut, Dulberg, S.
15. Norwalk Public School District, p. 29

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16. Caesar Rodney School District, p. 31

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17. Pinellas County

Georgia, Bottoms, G.
18. Atlanta City Public School District, p. 35
19. Crisp County Public School District, p. 35
20. Liberty County Public School District, p. 36

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21. University of Hawaii, p. 38

Idaho, Latham, J.
22. Boise, Idaho, Independent School District, p. 40

Illinois, McCage, R.D.
23. Southern Illinois University, p. 41
24. Northern Illinois University, p. 42
25. Peoria District No. 150, p. 42

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26. Elkhart Community Schools, p. 44
27. New Albany Floyd County Consolidated Schools, p. 44

Iowa, Wold, K.M.
28. Mason City Project, p. 46
29. Multiple School District Project, p. 47

Kansas, Rawson, W.
30. Fourteen Unified School Districts, p. 49

Kentucky, McKinney, F.
31. Green River Region, p. 51

Louisiana, O'Dowd, J.E., Jr.
32. Calcasieu Parish School Board, p. 53
33. Lafayette Parish School Board, p. 54

Maine, Ryan, C.W.
34. School Administrative District No. 9, Farmington, p. 56

Maryland, Pinson, N.
35. Washington County, p. 58

Massachusetts, Easton, C.W.
36. Springfield, p. 60
37. Milford, p. 60
38. Blue Hills Regional Vocational-Technical School Region, p. 61

Michigan, Stearns, K.
39. Pontiac, p. 63
40. University of Michigan, p. 64

Minnesota, Johnson, M.
41. State Vocational Research Coordinating Unit, p. 65

Mississippi, Morris, J.M.
42. Amory City Public School District, p. 68
43. New Albany Public School District, p. 68
44. Kemper County Public School District, p. 68
45. Franklin County Public School District, p. 69

Missouri, Robinson, B.W.
46. Eldon Public School District, p. 71
47. University City Public School District, p. 72

Montana, Ulmer, B.A.
48. Great Falls, p. 74

Nebraska, Vanier, B.R.
49. Milford, p. 76

Nevada, Eardly, V.J.
50. Washoe County School District, p. 78

New Hampshire, Cooper, G.
51. Keene Union School District of Supervisory Union #29, p. 80

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52. Newark, p. 82
53. Woodbridge (Middlesex County), p. 83

New Mexico, Harneson, D.
54. Taos Public Schools, p. 85

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55. City of New York, p. 87

North Carolina, Rogers, C.H.
56. Caldwell County Elementary and Secondary School Administrative Unit, p. 89

North Dakota, Lamp, R.
57. City of Bismarck, p. 91

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58. Akron, p. 92
59. Cincinnati, p. 93
60. Dayton, p. 94
61. Toledo, p. 96

Oklahoma, Frazier, W.D.
62. Sand Springs Public Schools, p. 98

Oregon, Dunham, D.
63. Portland School District No. 1 in Multnomah County, p. 100

Pennsylvania, Moody, F.B.
64. Meadville, p. 102
65. Philadelphia Public School District, p. 103
66. Ebensburg, p. 104
67. McKeesport Area School District, p. 105

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68. The City of East Providence, p. 107

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70. Sioux Falls, p. 111

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76. Ogden, p. 122

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77. Windsor Northwest School District, p. 124

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78. Petersburg Public School District, p. 126
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80. Spokane School District 81, Spokane Community College District 17, and surrounding districts, p. 129

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84. The public schools of the District of Columbia, p. 137

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85. Humacao, p. 138

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86. St. Thomas, p. 140

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87. Guam, five junior high schools, p. 141

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88. American Samoa, three high schools, p. 142

Trust Territory of the Pacific Islands, Brandner, W.
89. Koror in the Palau Islands, p. 143

Annual report on state research coordinating unit activities for fiscal year 1970. Washington, D.C.: Office of Education (DHEW), Division of Vocational and Technical Education. (ED 053 293)
EDRS Price MF-$0.65 HC-$3.29

During fiscal year 1970, the states received $1.1 million for research under Section 131(b) of Part C of the Vocational Education Amendment. This amount was sufficient for states to keep their Research Coordinating Units (RCU's) functioning, but provided very little for new research. The main activities of the RCU's were to disseminate results of research, answer inquiries, assist in the use of ERIC materials, assist in the preparation of proposals, assist in state program planning and development, and conduct research studies when monies were available. Evaluation studies were conducted by 13 RCU's. Thirteen states reported studies for the implementation of guidance systems or curriculum development, and 10 states reported research projects directed at problems of the disadvantaged and handicapped. Seminars and educational personnel development were frequently noted as research-related activities. This document contains summaries of quarterly reports from all 50 states. (RIE)

State research coordinating unit activities for the period July 1, 1970-December 31, 1970. Semiannual report. Washington, D.C. Bureau of Adult, Vocational, and Technical Education (DHEW/OE), 1971. (ED 052 381)
EDRS Price MF-$0.65 HC-$3.29

This report summarizes information received from State Research Coordinating Units (RCU's) regarding research activities conducted under Section 131 (b) of the Vocational Education Amendments of 1968. The purpose of the report is to provide information that will help states to be aware of research and development conducted by other states, thus facilitating exchange of information and reducing duplication of effort. Specific information is provided on a state-by-state basis in regard to projects completed, new projects funded, research and related activities, and projects and activities planned. (RIE)

The following Semiannual reports of state research coordinating unit activities are also available:

State research coordinating unit activities for the period January 1, 1971-June 3, 1971. Semi-annual report. Washington, D.C.: Bureau of Adult, Vocational, and Technical Education (DHEW/OE), 1972. (ED 067 463)
EDRS Price MF-$0.65 HC-$3.29

State research coordinating unit activities for the period July 1, 1971-December 31, 1971. Semiannual report. Washington, D.C.: Bureau of Adult, Vocational, and Technical Education (DHEW/OE), 1972. (ED 068 718)
EDRS Price MF-$0.65 HC-$3.29

State research coordinating unit activities for the period January 1, 1972-June 30, 1972. Semiannual report. Washington, D.C.: Bureau of Adult, Vocational, and Technical Education (DHEW/OE), 1973.

State research coordinating unit activities for the period July 1, 1972-December 31, 1972. Semi-annual report. Washington, D.C.: Bureau of Adult, Vocational and Technical Education (DHEW/OE), 1973.

State-administered research and development projects in vocational education, fiscal year 1971 and 1972. Washington, D.C.: Office of Education (DHEW), Division of Vocational and Technical Education, 1973.

Section 131 (b) of Part C of the Vocational Education Amendments of 1968 provides Federal funding for State-administered research and development activities in vocational education. The purpose of this publication is to provide a listing of the projects supported in each State through grants and contracts so funded. The listing, which is arranged alphabetically by States, shows the title of each project, the name of the grantee or contractor conducting the project, and the amount of Section 131 (b) funding obligated for the project.

Morgan, R.L. and Others (eds.) Synopses of selected career education programs: A national overview of career education. Raleigh, North Carolina: North Carolina State University, Center for Occupational Education, 1972. (ED 063 461)
EDRS Price MF-$0.65 HC-$3.29

Because of the emerging emphasis on career education, educators are becoming more interested in what is being done in both local and state programs. This document is the result of a series of on-site visits made by the North Carolina center staff to projects in 30 states and a review of self-studies submitted by the projects. Synopses of the self-studies are provided for 39 programs located in 10 U.S. Office of Education regions. Basic information includes grade levels, program goals, general characteristics, and a contact person for further information. In-depth descriptions are anticipated in a future publication. (RIE)

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Region II

Meyer, G.F., New Brunswick Public Schools, New Brunswick, New Jersey, p. 3

Schreiber, R.W., Mid-Hudson Career Development and Information Center, Beacon, New York, p. 5

Region III

English, J.L., Delaware's Occupational-Vocational Education Model, Milford, Delaware, p. 7

Pumphrey, E., Anne Arundel County Career Development, Annapolis, Maryland, p. 9

Carey, E.N., Baltimore-State Department of Education, Baltimore, Maryland, p. 11

Lamping, R.G., Pittsburgh Career Education Program, Pittsburgh, Pennsylvania, p. 13

Holstein, H.B., Lincoln County Schools, Hamlin, West Virginia, p. 15

Region IV

Willis, B., Broward County Schools Career Education Program, Fort Lauderdale, Florida, p. 17

Smith, J., Cobb County Occupational and Career Development Program, Marietta, Georgia, p. 19

Johnson, L., Henderson County Schools, Henderson, Kentucky, p. 21

Jenkins, J.D., Pikeville Schools, Pikeville, Kentucky, p. 23

Anthony, D., New Albany School District, New Albany, Mississippi, p. 25

Ross, M.B., Apex Exemplary Project, Wake County Schools, Raleigh, North Carolina p. 27

Woolard, G., Kershaw County School District, Camden, South Carolina, p. 29
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Freeman, J., Morrison County Career Development, Little Falls, Minnesota, p. 40
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Smith, C., Harlandale School District, San Antonio, Texas, p. 51

Region VII
Caruthers, B., Sr., Kansas City Unified School District #500, Kansas City, Kansas, p. 52
Coleman, E.J., Lawrence Unified School District #497, Lawrence, Kansas, p. 54

Region VIII
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Adkison, M.R., Ceres Unified School District, Ceres, California, p. 67

Region X

Lewellen, W.E., Springfield Public Schools, Springfield, Oregon, p. 69

Bauthues, D., Puyallup Public Schools, Puyallup, Washington, p. 71

Roberts, R.C., Renton School District #403, Renton, Washington, p. 73

Morgan, R.L., Shook, M.W., and Dane, J.K. (eds.) An anthology of 15 career education programs, volume 2. Raleigh, North Carolina: North Carolina State University, Center for Occupational Education, 1973.

The Center for Occupational Education, North Carolina State University, visited 41 programs as a result of the National Center for Education Communication, U.S. Office of Education's grant to "identify, document and spread" information about career education. All of these programs were new, dynamic and growing; none was fully developed. Fifteen of the 41 programs visited were chosen for dissemination in an exemplary manner. In this anthology, each of these fifteen programs is described in terms of goals and objectives, educational program, administration, program resources and program-community interaction.

The programs described are:

Pumphrey, E., Anne Arundel County, Annapolis, Maryland, p. 1

Adkison, M.R., Ceres Unified School District, Ceres, California, p. 21

Smith, J., Cobb County School System, Marietta, Georgia, p. 45

Bauer, R.E., Helena School District, Helena, Montana, p. 65

Clark, D., Holyoke School District Re-1J, Holyoke, Colorado, p. 87

Walton, J.C., Kershaw County School District, Camden, South Carolina, p. 104

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Coleman, E.J., Lawrence Unified School District #497, Lawrence, Kansas, p. 148

Porfily, C.M., Lebanon School District, Lebanon, Oregon, p. 172

Schreiber, R.W., Mid-Hudson Career Education Development and Information Center, Pleasant Valley, New York, p. 188

Anthony, D., New Albany School District, New Albany, Mississippi, p. 209

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B. Exemplary Programs and Projects

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The following projects are described in this publication. Interim reports for many of these projects have been processed into the ERIC collection and ED numbers are included if applicable.

Alabama

Garmon, B., Comprehensive Occupational Education Program for the Elementary and Secondary School #0-361-0150, Huntsville City Board of Education, pp. 12-13.

Alaska

Cleworth, I., Fairbanks North Star Borough School District Orientation-Work-Study-Placement Program #V-161-177, Fairbanks North Star Borough School District, pp. 14-15.

Arizona

Bazzetta, L.J., Tucson Model Cities Exemplary Vocational Education Program, #0-361-0160, Tucson Public School District No. 1, pp. 16-17.

Arkansas

Lyle, B.R., Pilot Occupational Education Programs for Small Rural and Suburban Arkansas Schools, Grades 5 through 12, #0-361-0032, Arkansas State Board for Vocational Education, pp. 18-19. (ED 063 458)

California

Bennett, R.L., Community College Vocational Cooperative Education, #0-361-0069, San Mateo Junior College District, pp. 20-21.

Sappington, Career Education Model, Orange County Consortium, #V261006, Orange Unified School District, pp. 22-23.

Adkison, R., Ceres Unified School District Career Education Responsive to Every Student; A K-14 Operational Model in Career Education, #V261007, Ceres Unified School District, pp. 24-25.

Colorado

DePetro, H.M., Operation Bridge--Innovative, Comprehensive Vocational Education Program for Disadvantaged Youth, #0-361-0120, Aims Junior College District, pp. 26-27. (ED 062 549)

Connecticut

Bonitatebus, J., Career Education, #0-361-0061, Bridgeport Board of Education, pp. 28-29.

Delaware

English, J.L., An Occupational-Vocational Education Model for the State of Delaware, #0-361-0013, State Board for Vocational Education, pp. 30-31. (ED 058 420)

Florida

Eaddy, K.M., An Exemplary Model for a Total Ecological Approach to Non-Graded Vocational Programs in Separate Educational Centers, #0-361-0094, Florida State Department of Education, pp. 32-33. (ED 060 193)

Eaddy, K.M., A Comprehensive Vocational Education Program for Career Development in Grades K-12, #V261004, Division of Vocational Education Department of Education, pp. 34-35.

Georgia

Smith, J.R., A Developmental Program of Occupational Education, #0-361-0063, Cobb County Board of Education, pp. 36-37.

Hawaii

Yoon, K., Occupational Information and Guidance Service Center, #0-361-0146, Hawaii State Community College System, pp. 38-39. (ED 067 461)

Idaho

Merrill, F.W., Exemplary Cooperative Education Program for the Development of Occupational Skills, Work Habits, and Attitudes, #V-161-175, Canyon School District Number 139, pp. 40-41.

Illinois

Dixon, J.J., Bridging the Gap Between High School and the World of Work, #0-361-0157, Chicago Board of Education, pp. 42-43.

Bowermaster, R., Comprehensive Career Planning System, #V261002, Rockford Board of Education, pp. 44-45.

Indiana

Winegard, R., Comprehensive Vocational Guidance Program for Model Cities, #1-361-0165, Indianapolis Public Schools, pp. 46-47. (ED 066 584)

Iowa

Winters, E.E., Area-Wide Project for Occupational Orientation, Exploration, Counseling, Job Training, and Job Placement for Elementary and Secondary Students, #0-361-0070, Pottawattamie County Board of Education, pp. 48-49.

Kansas

Rawson, W.A., An Exemplary Program in Occupational Education in Typical Rural, Rural-Urban and Urban School Settings, #0-361-0089, Kansas State Board of Education, pp. 50-51. (ED 067 454)

Kentucky

Jenkins, J., A "Universe Model" of Occupational Education for Pikeville, Kentucky in Conjunction with the Pikeville Model Cities Program, #0-361-0059, Eastern Kentucky University, pp. 52-53. (ED 061 419)

Louisiana

Young, W.G., An Exemplary Program for Occupational Preparation, #0-361-0125, New Orleans Public Schools, pp. 54-55. (ED 059 362)

Maine

Jordan, K.C., New Opportunities for Work (NOW), #1-361-0161, Lewiston Public School District, pp. 56-57.

Maryland

Carey, E.N., Maryland Career Development Project (K-Adult), (0-361-0021, Maryland State Department of Education, pp. 58-59. (ED 057 251)

Massachusetts

King, M.R., A Community Development Approach to Vocational and Leadership Training Using a Career Development Center, #0-361-0068, The New Urban League of Greater Boston, Inc., pp. 60-61.

Lamo, V.P., Project CAREER--Career Education Process for the Handicapped, #V261011, Massachusetts Board of Education, Division of Occupational Education, pp. 62-63.

Michigan

Rochow, R., Vocational Career Development Program, #0-361-0122, School District of the City of Pontiac, pp. 64-65. (ED 058 413)

Pelkey, E.L., A Comprehensive Career Education Development Project for the School District of Muskegon and Muskegon Heights, Michigan, #V261009, Muskegon Public Schools, pp. 66-67.

Minnesota

Van Tries, R.P., A Project to Demonstrate Making Vocational Education More Accessible to Persons In Rural Minnesota Through Cooperative Vocational Centers, #0-361-0105, Minnesota State Board for Vocational Education, pp. 69-70.

Clark, B., Exemplary Vocational Education Program Based on Environmental Studies (K-14), #1-361-0171, Minnesota Environmental Sciences Foundation, Inc., pp. 70-71.

Mississippi

McMinn, J.H., Career Centered Curriculum for Vocational Complexes in Mississippi, #0-361-0067, Mississippi State Department of Education, pp. 72-73. (ED 059 395)

Missouri

Welsh, D.J., Outreach for Urban Inner City Youth, #0-361-0174, School District of Kansas City, Missouri and Metropolitan Junior College District Kansas City, Missouri, pp. 74-75.

Montana

Korizek, W.A. "The Next Step" - A Comprehensive Program in Occupational Preparation and Placement, #1-361-0169, School District Number 1, Lewis and Clark County, pp. 76-77. (ED 060 187)

Nebraska

Parrish, E.H., Expanded Vocational Education Program for Disadvantaged Youth: Occupational Guidance K-12, Comprehensive Center for Occupational Education, #0-361-0028 (Revised), Omaha Public Schools, pp. 78-79.

Nevada

Trout, L.L., Jr., Washoe County School District Sequential Approach to Vocational Education - An Exemplary Program, #0-361-0121, University of Nevada, pp. 80-81.

New Hampshire

Mandell, J., World of Work (WOW), #0-361-0052, Contoocook Valley Regional School District, Peterborough, New Hampshire, pp. 82-83.

Riesenberg, J.J., Research and Development Project in Career Education; #V261037L, Keene Union School District of Supervisory Union #29, pp. 84-85.

New Jersey

Briant, R.A., Career Development - A Pre-School to Adult Model Program for the Hackensack, New Jersey School District, #0-361-0022, Department of Education, Vocational Division, State of New Jersey, pp. 86-87. (068 635)

Benus, K.M., Career Development - A Career Education Department from Pre-School to Adult Model Program for the Asbury Park, New Jersey School District, #V261003, Department of Education, Vocational Division, State of New Jersey, pp. 88-89.

New Mexico

Gonzalez, R., Tri-Cultural Vocational Exploratory Career and Work Experience Education Program, #0-361-0040, Bernalillo Municipal Schools, pp. 90-91.

New York

Johnson, S.L., Guided Occupational Orientation-Training and Job Placement, #0-361-0143, Syracuse City School District, pp. 92-93.

Murray, J.P., Career Education Project, #V261012, Buffalo City School District, pp. 94-95.

North Carolina

Carroll, R.O., The Implementation of A Comprehensive Occupational Education Program in a Rural School System, #0-361-0133, Wake County Schools, pp. 96-97. (ED 058 974)

North Dakota

Selland, L.G., A Program in Developmental Vocational Guidance (K-12) and Occupational Preparation for the Changing World of Work, #0-361-0047, North Dakota State Board for Vocational Education, pp. 98-99.

Ohio

Sims, W., Developmental Vocational Education Project, #0-361-0154, Cleveland Board of Education, pp. 100-101.

Oklahoma

Dreesen, R., An Exemplary Comprehensive Occupational Orientation Vocational Education Program for Selected Oklahoma Schools #0-361-0123, State Department of Vocational and Technical Education, pp. 102-103. (ED 055 239)

Oregon

McCaleb, O.K., Project BIGOR, #0-361-0055, David Douglas School District, pp. 104-105. (ED 058 418)

Pennsylvania

Lamping, R.G., Selected Functional Components of a Vocational Education Counseling System for Urban Youth, #0-361-0149, Pittsburgh School District, pp. 106-107.

Rhode Island

Melucci, E.M.J., A Human Resources Career Development Model for Pawtucket, Rhode Island in conjunction with the Pawtucket Model Cities Agency, #0-361-0155, Pawtucket School Department, pp. 108-109.

South Carolina

Brown, S.R., Exemplary Project in Career Education in South Carolina Region V, #0-361-0006, Lancaster County Board of Education, pp. 110-111. (ED 058 408)

South Dakota

Carlson, C., K through 12 Project of Career Development Occupational Counseling, and Bridging the Gap between School and Work, #0-361-0159, Watertown Independent School District #1, pp. 112-113. (ED 060 179, ED 069 932)

Tennessee

Hugueley, J.E., Project SPAN - An Accelerated Project for a Systems Program Approaching Non-Unemployment of Vocational Students #01-361-0015, Memphis City Schools, pp. 114-115.

Texas

Antu, L.U., Vocational Opportunities Integrated in Current Education (VOICE), #0-361-0158, San Antonio Independent School District, pp. 116-117.

Utah

Jones, H., Diversified-Satellite Occupations Program, #0-361-0056, Granite School District, pp. 118-119. (ED 060 196)

Vermont

Farnum, F., Integrated Vocational Education Program, #1-361-0172, Franklin Northeast Supervisory Union, pp. 120-121.

Virginia

Coxton, B., Dilenowisco Four I's Project, #0-361-0050, Dilenowisco Educational Cooperative, pp. 122-123.

Washington

Hunter, R.C., Central Area Schools Occupational Development Program, #0-361-0168, Seattle Public School System, pp. 124-125. (ED 061 421)

West Virginia

Holstein, H., Improving a Rural Area School Program with Expanded Vocational Education Services by Utilizing Comprehensive Career Orientation and Exemplary Activities, #0-361-0170, Lincoln County Schools, pp. 126-127. (ED 059 365, ED 059 387, ED 059 388, ED 059 389, ED 059 390, ED 059 391)

Wisconsin

Bingner, C., Articulation of Occupational Orientation, Education, and Placement in Private and Public Elementary, Secondary and Postsecondary Schools, #1-361-0166, Sheboygan Public Schools, pp. 128-129. (ED 073 298)

Wyoming

Sizemore, P., The Development and Demonstration of a Functional Model System of Occupational Education for Wyoming Public Education K-14, #0-361-0023, Wyoming State Department of Public Instruction and State Board for Vocational Education, pp. 130-131.

District of Columbia

Cawein, P.E., Implementing a K-12 Career Development Program in the District of Columbia, #0-361-0137, The Public Schools of The District of Columbia, pp. 132-133.

Trust Territory of the Pacific Islands

Trust Territory of the Pacific Islands Industrial Vocational Education Curriculum Orientation and Development Project, #V-161-175, U.S. Trust Territory of the Pacific Islands, Department of Education, pp. 134-135.

Puerto Rico

Sanchez, G., Carolina School District Sequential Approach to Career Orientation and Preparation, #0-361-0164, Commonwealth Board for Vocational Education, pp. 136-137.

Sanchez, G., Research and Development Project in Career Education, #V261050L, Commonwealth Board for Vocational Education, pp. 138-139.

American Samoa

Reinhart, R., Research and Development Project in Career Education, #V261048L, Department of Education, American Samoa, pp. 140-141.

Guam

Ball, R., Building Maintenance and Repairs--Pre-Vocational, #V161178, Territorial Board of Control for Vocational Education, Government of Guam, pp. 142-143.

Pierce, D.I., Research and Development Project in Career Education, #V261058L, Territorial Board for Vocational Education, p. 144.

Virgin Islands

Smith, W., Research and Development Project in Career Education, #V261051L, Department of Education, U.S. Virgin Islands, pp. 145-146.

Exemplary Projects Funded Under Section 142 (c)--Part D--Public Law 90-576, (second Three-Year Round), June 1973, 11 pp.

Alabama

Jackson, J.W., A School-Community Career Education Project, #0-73-5284, Opelika City Schools.

Alaska

Davis, E.E., Anchorage Borough Exemplary Career Education Project, #0-73-5299, Anchorage Borough School District.

Arizona

McKinnon, B.E., Demonstrating the Planning, Implementation, and Evaluation of Developmental Guidance, Counseling, and Placement Components in a Career Education System, #0-73-5286, Mesa Public Schools.

Arkansas
Merrell, C.H., An Exemplary Career Education Project for Southeast Arkansas, #0-73-5307.

California
No new proposals initiated for FY 1973 program.

Colorado
Keller, L.J., Career Oriented Education Project, #0-73-5279, University of Northern Colorado.

Connecticut
Venditto, C.R., Penetrating School Strata Through Career Education, #0-73-5301, Bristol School System.

Delaware
No new proposals initiated for FY 1973 program.

District of Columbia
Etheridge, B.D., Career Education in the Inner City, #0-73-5283, Carver School.

Florida
No new proposals initiated for FY 1973 program.

Georgia
Bottoms, J.E., Career Education for Rural Georgians, #0-73-5319, State Board for Vocational Education.

Hawaii
Shigetomi, S.S., Career Information Center, #0-73-5314, State Board for Vocational Education.

Idaho
Slane, K., Bingham County Developmental Career Education Emphasizing Career Awareness, Orientation, Exploration, and Preparation for the World of Work, #0-73-5300, Aberdeen School District 58.

Illinois
McCage, R.D., Comprehensive Illinois Occupational Education Demonstration Center, #0-73-5294, Division of Vocational-Technical Education.

Indiana
Gentry, D.K., Career Development and Meaningful Exploratory Experiences to Middle School Students in Southern Indiana Utilizing Mobile Design Education Units, #0-73-5312, Division of Vocational Education.

Iowa

Gabriel, R., Comprehensive Career Curriculum, #0-73-5280, Vocational and Technical Education.

Kansas

Rawson, W.A., Consortium Approach to Exemplary Career Education Program Development Involving Two Unified School Districts and Two Teacher Education Institutions, #0-73-5313, State Department of Education.

Kentucky

Jenkins, J.D., A Cooperative Career Education Project Involving the Fayette County Schools, Eastern Kentucky University and the Central Kentucky Vocational Region, #0-73-5316, Eastern Kentucky University.

Louisiana

Kratochvil, D.W., An Exemplary Program for Career Education, #0-73-5308, State Department of Education.

Maine

MacLeod, G.H., REVAMP--Revitalize the Vocational and Academic Multifarious Program Through Career Education, #0-73-5305.

Maryland

Clopper, R.R., Career Education, #0-73-5282, Board of Education of Anne Arundel.

Massachusetts

No new proposals initiated for FY 1973 program.

Michigan

VanKoughnett, B.C., Pontiac Adult-Student Learning System (PALS), #0-73-5287, Community Action Programs.

Minnesota

No new proposals initiated for FY 1973 program.

Mississippi

McMinn, J.H., An Urban Career Education Project in the Mississippi Delta, #0-73-5275, Research, Curricula, and Teacher Education, Division of Vocational-Technical Education.

Missouri

Fielding, M.R., To Develop and Implement a Comprehensive Career Education Program K-14 in a Three-County Non-Urban Area in Missouri, #0-73-5311, State Fair Community College.

Montana

Carlson, R.S., An Exemplary Career Education Program in the Great Falls Public Schools (K-14), #0-73-5278, Great Falls Public Schools.

Nebraska

Spencer, C., Lincoln Career Education Project, #0-73-5290.

Nevada

Paul, J.T., Career Education Program, #0-73-5293, Clark County School District.

New Hampshire

No new proposals initiated for FY 1973 program.

New Jersey

No new proposals initiated for FY 1973 program.

New Mexico

Miller, J., A Career Implementation Program for a Small Rural School: Penasco, New Mexico, #0-73-5302, Program Development Unit, State Department of Education.

New York

No new proposals initiated for FY 1973 program.

North Carolina

Shitehurst, S.D., Career Motivation and Development for the Tarboro City Schools, #0-73-5318, Tarboro City Schools.

North Dakota

Weisenberger, H., A Developmental Program, Pre-School-Adult, in Career Education for North Dakota, #0-73-5277, State Board for Vocational Education.

Ohio

Balthaser, R.D., Three Pilot Career Education Programs for Grades K-10 in Ohio, #0-73-5317, Division of Vocational Education.

Oklahoma

Dreessen, R., Academic and World of Work Gap-Bridging Through Career Education, #0-73-5321, State Department of Vocational-Technical Education.

Oregon

Kimball, D., Comprehensive Career Education Process in Springfield Public Schools, #0-73-5288, Springfield School District.

Pennsylvania

Lareau, E.H., Language Experience Based Awareness + Hands on Exploration + Competency Based Preparation = A School Based Total Career Education Model, #0-73-5272, Admiral Peary AVTS.

Samuels, M.H., BHQ Careers, #0-73-5276, Allegheny Intermediate Unit 3.

Cohen, S.B., A Comprehensive Career Education Model K-14, #0-73-5273, John F. Kennedy Center.

Rhode Island

Rennick, P.T., Career Education-North Kingstown: A Model for Open Education and Community Responsibility, #0-73-5304, North Kingstown School Department.

South Carolina

Tyler, H.B., Implementation of a Comprehensive Careers Curriculum Through School, Home and Community, #0-73-5285, Richland County School District, #2.

South Dakota

Carlson, C., Statewide Implementation of a K-14 Project of Career Education, Occupational Counseling, and Bridging the Gap Between School and Work, #0-73-5291, Watertown ISD #1.

Tennessee

Griffin, H.B., Tennessee Exemplary Project in Career Education, #0-73-5274, Greene County Schools.

Texas

Vestal, T.M., Coordinated Effort for Career Education, #0-73-5309, Grayson County College.

Shindler, R.C., A Career Education Counseling Project, #0-73-5255, Corpus Christi ISD.

Smith, G., PROJECT RACE: Researched Activities for Career Education, #0-73-5306, Weatherford Independent SD.

Utah
Wright, D., A Continuum Model for Career Development Education K-14, #0-73-5315, Davis County Schools.

Vermont
Sullivan, J., Windham Central Exemplary Career Education Project, #0-73-5303, Windham Central Supervisory Union.

Virginia
Coleman, S., Career Education Now! Model for Career Education Curriculum K-14 for a Rural-Urban School District, #0-73-5310, Bedford County Public Schools.

Washington
Yormarck, B.A., Highline's Career Alternatives Model, #0-73-5289.

West Virginia
Burdette, C.E., A Design for Establishment of a Career Oriented Educational Program Through a Regional Education Service Agency, #0-73-5295.

Wisconsin
Paulsen, R., Career Education for Persons in Rural Areas--Primary Focus on Adults 16 and Over, #0-73-5292, North Central Technical Institute.
Pendleton, J.R., Implementation of a Program and Delivery System for Comprehensive Career Education in a Rural Area, #0-73-5297, Western Wisconsin Technical Institute.

Wyoming
Sizemore, P.L., A Model Project in Career Education, K-12, #0-73-5281, Department of Education.

Samoa
Benioni, P., Career Guidance, #0-73-5320, Department of Education.

Guam
Pierce, D.I., Career Awareness Packages for Elementary and Secondary (CAPES), #0-73-5298, Department of Education.

Puerto Rico
de Charneco, A.Ll., Development of a Comprehensive Model for Career Education in Puerto Rico, Vocational and Technical Education Program, #0-73-2991.

Saipan Mariana Islands

Brandner, W.J., Career Awareness Curriculum Development and Implementation Project Providing Exploratory and Student Counseling Activities, #0-73-5296, Trust Territory Department of Education.

Virgin Islands

Smith, W., Jr., Research and Development Project in Career Education (Part C and D funds combined), #0-73-2984, Department of Education.

C. Career Education Model Development

In Fiscal Year 1971, the U.S. Office of Education began research and development of four types of delivery systems for career education. The models are being developed and tested in funded projects and are undergoing constant revision. References related to these four models, follow. (See also "career education" in special issues of educational journals, pp. 18 and 19).

School-Based Model I

The comprehensive career education model. Progress report (June 1971-May 1972). Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 068 736) EDRS Price MF-$0.65 HC-$3.29

This history of the development of the Comprehensive Career Education (School Based) Model (CCEM), includes historical antecedents of the project, early organizational activities, major conceptual focuses, and current efforts. In June 1971 the Center for Vocational and Technical Education (CVTE) at The Ohio State University in Columbus, Ohio was awarded a $2 million grant by the U.S. Office of Education (USOE) for the developmental phase of this career development program, which utilizes a comprehensive systems approach for Kindergarten through post-secondary education. Supplemented by a $1.7 million grant in October 1971, the USOE selected six Local Education Agencies from 53 candidates, providing each with a CVTE resident project team to offer technical assistance, on-site consultation and a direct liaison with CVTE, which is accountable to the USOE for the entire program and funds expended. The CCEM project identified: (1) eight conceptual elements, (2) eight student learning objectives, and (3) a matrix, or developmental model, with 32 themes and 1,477 sequential goals extending across all grade levels. Operational and evaluation procedures for CCEM are delineated, and program developments are specified. (RIE)

Related References:

A first step toward career education. A project to identify, compile, catalogue, analyze and assess past and present career education efforts to support comprehensive career education model I objectives. Vol-

ume I and volume II--appendices. Scottsdale, Arizona, Palo Alto Educational Systems, Inc., 1972. (ED 060 224)
EDRS Price MF-$0.65 HC-$9.87

Taylor, J.E. and Others. An occupational clustering system and curriculum implications for the comprehensive career education model. Alexandria, Virginia: Human Resources Research Organization, 1972. (ED 061 427)
EDRS Price MF-$0.65 HC-$3.29

Reinhart, B. School-based comprehensive career education model. In Daugherty, R. and Others, Proceedings of the national seminar for state directors of community-junior colleges (January 10-11, 1972). Final report. Washington, D.C.: American Association of Junior Colleges; Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 062 520)
EDRS Price MF-$0.65 HC-$6.58

Miller, A.J. Strategies for implementing career education: A school-based model. In Career education: Papers presented at the 1972 annual meeting of the American Educational Research Association (Chicago, Illinois, April 4, 1972). Washington, D.C.: American Educational Research Association, 1972. (ED 062 539)
EDRS Price MF-$0.65 HC-$3.29

_____. The emerging school-based comprehensive career education model. In Combined resource papers from the national conferences on career education--for deans of colleges of education and for professors of educational administration. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 064 498)
EDRS Price MF-$0.65 HC-$9.87

Reinhart, B. A comprehensive career education model: A bridge between school and work. Presentation to Southwide Research Coordinating Council, Clearwater, Florida, May 1972. (ED 065 690)
EDRS Price MF-$0.65 HC-$3.29

Brickell, H.M. and Aslanian, C.B. Attitudes toward career education. A report of an initial study of pupil, staff, and parent opinions in Atlanta, Hackensack, Jefferson County, Los Angeles, Mesa, and Pontiac.

New York: Institute for Educational Development, 1972. (ED 068 636)
EDRS Price MF-$0.65 HC-$6.58

Comprehensive career education models: Problems and prospects. Syracuse, New York: Syracuse University Research Corporation, Educational Policy Research Center, 1971. (ED 072 227)
EDRS Price MF-$0.65 HC-$3.29

Norton, R.E. In-service education: Vital to career education delivery. Paper presented at the American Vocational Association Convention, Chicago, Illinois, December 1972. (ED 073 264)
EDRS Price MF-$0.65 HC-$3.29

Sampieri, R. School-based career education. In Beck, J.R. Conference proceedings: Community dialog in career education part I (San Jose, California, July 14, 1972). San Jose, California: California State University, 1972. (ED 074 238)
EDRS Price MF-$0.65 HC-$3.29

_____. Comprehensive career education model. Thrust for Education Leadership, 1972, 1(5), 10-14.

Van Koughnett, B.C. and Justiz, T.B. Pontiac; career education community. American Vocational Journal, 1972, 47(3), 37-38+.

Employer-Based Model II

Banathy, B.H. and Peterson, R.M. Employer based career education (EBCE). Berkeley, California: Far West Laboratory for Educational Research and Development, 1972. (ED 065 664)
EDRS Price MF-$0.65 HC-$3.29

The Far West Laboratory for Educational Research and Development is designing the employer based career education model. The model, now at the advanced design phase and soon to be pilot tested, reflects: (1) a comprehensive educational program, (2) the needs of youth, ages 13-18, (3) an educational system to be controlled by public and private employers, (4) the importance of career exploration, (5) an individualized program, (6) the need for performance-based learning objectives, and (7) an educational program that is economically feasible. Another significant

aspect of the model is the integrated curriculum approach to meeting the following needs of students: (1) self-awareness, (2) self sufficiency, (3) decision-making skills, (4) social skills, (5) basic cognitive skills, (6) career skills, and (7) skills of employability. (RIE)

Related References:

Rhyne, R.F. and Others. A futures perspective on employer-based career education, 1971-2000. Menlo Park, California: Stanford Research Institute, 1971. (ED 061 733)
EDRS Price MF-$0.65 HC-$3.29

Banathy, B.H. and Peterson, R.M. Employer-based career education (EBCE): A model developed at the Far West Laboratory for Education; Research and Development. In Career education: Papers presented at the 1972 annual meeting of the American Educational Research Association (Chicago, Illinois, April 4, 1972). Washington, D.C.: American Educational Research Association, 1972. (ED 062 539)
EDRS Price MF-$0.65 HC-$3.29

Vander Kamp, A.A. Career education provided by business and industry in the Milwaukee area. Final report. Madison, Wisconsin: Wisconsin State Board of Vocational, Technical, and Adult Education, 1972. (ED 070 875)
EDRS Price MF-$0.65 HC-$3.29

Dunn, J.A. and Others. Feasibility of guidance, counseling, and pupil personnel services in employer-based career education. Final report. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1972. (ED 072 257)
EDRS Price MF-$0.65 HC-$6.58

Peterson, R. Employer-based career education. In Beck, J.R. Conference proceedings: Community dialog in career education part I (San Jose, California, July 14, 1972). San Jose, California: California State University, 1972. (ED 074 238)
EDRS Price MF-$0.65 HC-$3.29

Arnold, W.M. USOE model building efforts to produce show case career education programs. Industrial Arts and Vocational Education, 1972, 61(3), 5.

Hagans, R. and Svicarovich, J. Employer based career education model. Educational Leadership, 1972, 30(3), 222-224.

Home/Community-Based Model III

Worthington, R.M. Home-community based career education model. Educational Leadership, 1972, 30(3), 213-214.

The home-community based career education model "is a career-oriented approach designed to enhance the employability and career options of out-of-school adults," according to Worthington. The utilization of mass media and "the capacities of the existing service networks" are high-potential channels for successfully reaching the adult population with career information. Worthington describes federal efforts to develop a home-community based model.

Related Reference:

Butler, C.F. The home/community-based model of the U.S. Office of Education's career education R & D program: A synopsis. In Career education: Papers presented at the 1972 annual meeting of the American Educational Research Association (Chicago, Illinois, April 4, 1972). Washington, D.C.: American Educational Research Association, 1972. (ED 062 539)
EDRS Price MF-$0.65 HC-$3.29

Rural/Residential-Based Model IV

The residential career education concept: The mountain-plains program. An overview. Glasgow, Montana: Mountain-Plains Education and Economic Program, Inc., 1972. (ED 072 271)
EDRS Price MF-$0.65 HC-$3.29

The objective of the Mountain-Plains Education and Economic Development Program, (MPEEDP), is to develop through action research and experimentation, integrated career education methods and programs which can be implemented on a widespread basis. This experimental demonstration activity involved various individuals, agencies, and other resources in preparing adults and children of rural unemployed and underemployed

families in Wyoming, Montana, Idaho, North Dakota, South Dakota, and Nebraska for rewarding employment. The private non-profit corporation, MPEEDP, with its core management team located at Glasgow Air Base in Montana, will develop a comprehensive research design from the initial selection of participants through job placement and followup, and will train the staff for each state. Program goals, objectives, and philosophy are detailed. Various reports and conferences on new methods will document the progress of this career education model. (RIE)

Related Reference:

Perryman, B.C. Written statements of operational definitions--career education. Glasgow, Montana: Mountain-Plains Education and Economic Program, Inc., 1972. (ED 072 272)
EDRS Price MF-$0.65 HC-$3.29

D. ESEA Title III, Career Education Programs

Benson, A. A resource guide for career development in the junior high school. St. Paul, Minnesota: Minnesota State Department of Education, Pupil Personnel Services Section, 1972. (ED 067 469)
EDRS Price MF-$0.65 HC-$9.87

This resource guide for a developmental junior high career education program contains general description, and a wide range of resource materials, including student and teacher worksheets and evaluation forms. Developed by a junior high counselor and funded by the Elementary Secondary Education Act, Title III, Guidance and Counseling, the unit is three-hole punched for insertion in a ring binder. Learning activities, specific subject area and grade level, and resource lists are presented in a 3-column chart format. An annotated list of films is included. Simulation games and other group activities are provided. (RIE)

Letson, J.W. Formulation of models for preparing occupational materials for pupils from various socio-economic levels in grades three through eight. Atlanta, Georgia: Atlanta Public Schools, 1969. (ED 043 063)
EDRS Price MF-$1.25 HC-$15.40

This document accompanied a request from the Atlanta Public Schools to the United States Office of Education for a Title III continuation grant which would enable that school system to continue an innovative program intended to develop, compile and disseminate appropriate occupational information for elementary school age children. The report is comprised of four sections, two of which constitute its bulk: (1) a narrative account of the rationale behind, purposes of, and planning which went into the program design, a summary of its accomplishments to date in the area of materials compiled and developed, and an exposition of the evaluative techniques utilized; and (2) an informational run-down of projected activities and anticipated needs, should the grant be continued. All budgetary expenditures and needs are included. In the appendices, the accomplishments, summarized in the body of the report, are presented in their actual form. The research reported herein was funded under Title III of the Elementary and Secondary Education Act. (RIE)

Related Reference:

Occupational information via TV. Occupational information materials project. Atlanta, Georgia: Atlanta Public Schools, 1970. (ED 063 462)
EDRS Price MF-$0.65 HC-$6.58

"Countdown to the 70's." Occupational information for upper elementary and middle grades. Tallahassee, Florida: Florida State Department of Education, Division of Vocational, Technical and Adult Education, 1971. (ED 059 364)
EDRS Price MF-$0.65 HC-$6.58

An innovation approach to teaching elementary and secondary students about the world of work was developed under ESEA Title III funds in Atlanta using 39 television programs. This program guide was adapted from the Atlanta program for use in Florida schools. Although it is built around the 39 films, most of the information will be useful to the teacher or curriculum writer in the present form. Each unit represents an occupational area, such as employment opportunities in hospitals, education, banking, or major industries such as petroleum, textiles, or newspapers. For each occupational area, specific jobs are defined according to duties, personal qualifications and training. Thus for the unit covering education, the specific jobs of principal, teacher, teacher aide, custodian, cafeteria manager, secretary, counselor, librarian, library aid, maintenance mechanic, and statistician are outlined. Suggested supplementary activities, a glossary of related vocabulary terms as listed in each unit, and recommended references are included. (RIE)

Khanna, L.J. and Others. Project Upper Cumberland, Title III ESEA. Final report. Livingston, Tennessee: Overton County Board of Education, 1970. (ED 043 439)
EDRS Price MF-$1.00 HC-$10.85

Project Upper Cumberland--serving 16 Tennessee counties from July 1, 1967 through September 30, 1970--sponsored a teachers' in-service program emphasizing human relations training, a cultural arts program (grades 1-12), and a guidance and counseling program (grades 1-9). All 3 programs had the general goal of changing

and improving attitudes and self-concepts of rural mountain children. The programs, funded under Title III of the Elementary and Secondary Education Act, were evaluated by faculty members from Tennessee universities. Teachers participating in the human relations in-service program scored higher on a measure of self-actualization, displayed a higher degree of interpersonal thinking, and were more change-oriented than nonparticipating teachers. Children in the cultural arts program showed a tendency toward increase originality and the ability to elaborate on an idea. Both elementary and junior high counseling programs received positive feedback from children and teachers and were credited with improving school morale. The dropout rate for junior high school students participating in the counseling program decreased significantly. One of the project's greatest contributions was to demonstrate that new programs could be staffed with local personnel and could be carried on in existing, often inadequate, facilities without unreasonable demands on local systems for materials and supplies. (RIE)

Related Reference:

Flanders, J.N. and Others. Project Upper Cumberland. Final report. Project Upper Cumberland cultural arts program. Final evaluation. Demonstration program in guidance and counseling. An evaluation. Livingston, Tennessee: Project Upper Cumberland, 1970. (ED 043 058)
EDRS Price MF-$0.50 HC-$5.50

Vocational development: Quality education program study. Booklet 8 (description). Doylestown, Pennsylvania: Bucks County Public Schools; Harrisburg, Pennsylvania: Pennsylvania State Department of Education, 1971. (ED 063 374)
EDRS Price MF-$0.65 HC-$3.29

Categories of effective and ineffective behavior in regard to Goal Eight of the Quality Education Program (regarding vocational development) are listed. Both the rationales for areas of effective student behavior and the categories of teacher strategies are also included.

Related Reference:

Vocational development: Quality education program study. Booklet 8-A (needs assessment). Doylestown,

Pennsylvania: Bucks County Public Schools; Harrisburg, Pennsylvania: Pennsylvania State Department of Education, 1971. (ED 063 375)

Occutapes. Columbus, Ohio: Ohio State Department of Education, Division of Guidance and Testing; Mansfield, Ohio: Richland County Board of Education, 1971. (ED 055 215)
EDRS Price MF-$0.65 HC-$3.29

This project was initiated under provisions of Title III to develop guidelines and recommendations for the development and use of videotaped field trips in guidance and career education in Ohio. The purposes of the project were to: (1) develop and field test career orientation videotapes (occutapes), (2) refine the tapes and procedures for producing such tapes, and (3) prepare guidelines and present programs to promote the use of the occutape technique within the Ohio educational community. Implementation of the project involved primarily: (1) the cooperation of a steering committee of counselors and school administrators, local business and industrial leaders, local labor unions, and school guidance counselors, and (2) feedback and evaluation of the pilot tapes by students, teachers, and course counselors after field testing, as the basis for revision of the tapes and preparation of the project report and recommended guidelines. Although not as comprehensive as originally planned, the field testing evaluation suggested that the use of locally produced videotapes in business and industry is an extremely effective technique for broadcasting student understanding of the local economic world. (RIE)

E. Individually Reported State and Federally Sponsored Career Education Programs

In addition to the compilations of projects presented in previous sections of this chapter, many State and Federally sponsored programs were reported in ERIC and the periodical literature as separate entries. To assure comprehensiveness of coverage, abstracts of these selected programs follow.

Abstracts of research and development projects, fiscal 1971. Springfield, Illinois: Illinois State Board of Vocational Education and Rehabilitation, Vocational and Technical Education Division, 1971. (ED 072 270)
EDRS Price MF-$0.65 HC-$3.29

> This booklet contains 25 abstracts of research and development projects funded in the fiscal year of 1971 for the Research and Development Unit of Illinois Division of Vocational and Technical Education. Intended to make educators and the general public aware of research and developmental activities in vocational education in Illinois, these abstracts include the project objectives and their procedures of implementation. Major goals in 1971 included exemplary activities designed to enrich and broaden vocational education in the following areas: (1) planning and decision-making at the local and state levels, (2) instructional innovation emphasizing contemporary occupational needs, (3) effective evaluation of contracted research, (4) dissemination of all research activities, and (5) activities aimed at implementing a fully articulated career development program from Kindergarten through Grade 14. For each project, the name of the principal investigator, the sponsoring institution, and funding data are provided. (RIE)

An analysis of the career orientation project in social studies. Cincinnati, Ohio: Cincinnati Public Schools, 1971. (ED 056 938)
EDRS Price MF-$0.65 HC-$3.29

> In 1969 the Cincinnati Public Schools received a grant from the Ohio State Department of Vocational Education to develop interdisciplinary career orientation materials for junior high school pupils. The preliminary social studies materials were taught

in grades seven and eight for one year, then revised. During 1970-1971 each social studies teacher in the project selected activities from the new manual, Man: His Life and Work; twenty-one teachers in four schools were involved. Each activity was prepared for use under one of the following topics: American History, Urban Living, Ohio History, and Social Sciences. Objectives were coded to the categories of Bloom's taxonomy. In March, 1971 teachers were asked to report the mean achievement of their classes on the activities they taught using a standard form (Appendix A). The mean achievement was then determined for each teacher and each activity; it was then possible to determine mean achievement for topic categories, categories in Bloom's taxonomy, and by income level of school. A T-test of independent means was then applied to the results to determine if differences in income level affected mean achievement or achievement by category of the taxonomy. The mean achievement for the 269 activities was 84 with no significant difference between low-income and average income schools. Teachers taught more activities in American History and Urban Living, and preferred activities from the cognitive categories. In-service teacher training was suggested. (RIE)

An analysis of fifteen occupational clusters identified by the U.S. Office of Education. Sherman/Denison, Texas: Grayson County College, 1972. (ED 067 474)
EDRS Price MF-$0.65 HC-$16.45

To fill a need for defining and describing 15 occupational clusters identified by the U.S. Office of Education for a comprehensive career education program in a Texas county, this federally funded analysis presents separately for each of the 15 clusters a rationale, methodology, sub-groupings into job families and occupational listings, and a chart of occupational areas. Developed by 15 consultants, these job classifications will prove helpful for vocational counseling purposes. Job identification numbers from the government publication, "Dictionary of Occupational Titles," are included with the occupational information. (RIE)

Arkansas guidebook for vocational orientation. Little Rock, Arkansas: Arkansas State Department of Education, Division of Vocational, Technical and Adult Education, 1971. (ED 061 433)

This guide book of units designed to help teachers implement career or vocational orientation experiences for grades 7, 8, and 9 was developed by vocational teachers and revised in a workshop session. Broad areas include: (1) Self-Understanding for Success in the World of Work, (2) General Study of Occupations, (3) Exploring Occupations in Relation to Self, (4) The Decision-Making Process, (5) Making a Long-Range Training Plan, and (6) Procedures for Seeking, Getting and Keeping a Job. Each unit contains: (1) a teacher's section consisting of teacher objectives, suggested teaching activities, factors to consider, bulletin board and transparency ideas, and references, and (2) a student's section consisting of student behavioral objectives, a pretest, information section, and review questions. (RIE)

Baker, R.A. and Others. A pilot investigation for developing and operating a state occupational information service system for vocational-technical education. Final report. (ED 052 374) EDRS Price MF-$0.65 HC-$3.29

To investigate and resolve some of the problems associated with developing a permanent state-wide occupational information service system for planning and programing vocational education, a small scale data bank was developed for six selected countries in Alabama. Inputs were collected from 38 high schools offering vocational education, two post-secondary vocational institutes, three county employment offices, one chamber of commerce, four institutions offering non-public supported programs, and some manpower training programs. The occupation-industry material approach was used to estimate employment levels, and a cross tabulation computer program was used to project employment. The information output components were: (1) demographic, (2) manpower demand, (3) manpower supply, and (4) resources inventories. Charts and exhibits illustrate the kinds of information available and its output organization from the system. (RIE)

Bailey, L.J. Career development for children project: Final report. Carbondale, Illinois: Southern Illinois University, 1973.

The primary purpose of the project was to develop experimental career development curriculum materials for elementary and junior high school students. Supporting aims were to develop a logical-theoretical paradigm and comprehensive, organized curriculum framework. To achieve program objectives the operational tasks were those of designing behavioral descriptions to encompass the "developmental tasks" of career development at various age levels, deducing general and specific performance objectives at each developmental level, and designing learning experiences to enable each individual to successfully cope with the demands of each career developmental task. Curriculum materials and teachers guides were developed to enable each student to learn about "self" and the "world of work" at greater levels of specificity.

Related References:

Bailey, L.J. A curriculum model for facilitating career development. Carbondale, Illinois: Career Development for Children Project, 1971. (ED 060 198)

Cole, H. Approaches to the logical validation of career development curricula paradigms. Carbondale, Illinois: Career Development for Children Project, 1973.

Turner, K.G. A theory of the functional self. Carbondale, Illinois: Career Development for Children Project, 1973.

Van Rooy, L. Readability studies and the writer of instructional materials. Carbondale, Illinois: Career Development for Children Project, 1973.

Van Rooy, W.H. and Bailey, L.J. A conceptual model of the world of work. Carbondale, Illinois: Career Development for Children Project, 1972.

Budke, W.E. Case studies of cooperative programs between school and industry. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972. (ED 068 708)
EDRS Price MF-$0.65 HC-$3.29

This report contains 24 case studies related to cooperative efforts between business and industry and educational agencies. Studies are arranged according to their current status, including whether they are on-going, not presently operating, or their status is uncertain. A short description is provided for each program, together with the source of information and the contact person. Abstracts of eight documents which have appeared in "Research in Education" and which pertain to school-industry relationship are also included. The abstracts are arranged by accession number and include author(s), title, source of availability, terms describing the document contents, and a brief abstract. (RIE)

Cameron, W.A. Project INFOE (information needed for occupational entry). Final report, phase I. Knoxville, Tennessee: Tennessee Occupational Research and Development Coordinating Unit; Nashville, Tennessee: Tennessee State Department of Education, Division of Vocational-Technical Education, 1972. (ED 065 717)
EDRS Price MF-$0.65 HC-$3.29

The Information Needed for Occupational Entry (INFOE) Project incorporated the use of microfilm aperture cards to help students acquire information about local employment opportunities and qualifications for various occupations. To assess the impact of Project INFOE in pilot schools within the state of Tennessee, information was obtained from students and counselors concerning the INFOE materials. This data revealed that counselors generally felt the need for more information on professional type careers. Also, a few counselors expressed a desire for INFOE cards with general information on job interviews and how to select a career. Student opinions regarding the INFOE materials were gathered by means of a pretest-posttest design. Seventy of the 164 students responding indicated that INFOE materials helped them select a vocational education course. A major recommendation of the study is that the deck of job titles should be disseminated to any school in the state that will make effective use of them. (RIE)

Cochran, J.R. and Weis, D.M. An evaluation of two career exploration programs in 1970-71. Akron, Ohio: Akron University, 1972. (ED 073 310)
EDRS Price MF-$0.65 HC-$6.58

An evaluation of vocational interests of students in Grades 9 and 10 in two pilot career exploration programs, one at an area vocational school and the other at a general high school, was conducted to determine whether or not the programs were: (1) developing a positive self-image as a potential worker, (2) providing a program valued by students and parents, (3) developing appropriate career interest patterns based on self-awareness and vocational awareness, and (4) developing educational and vocational planning abilities. Students in the two experimental schools plus a control school without vocational programs were administered the Ohio Vocational Interest Survey, the Tennessee Self-Concept Scale, and the Career Plans Survey in the fall of 1970 and again in the spring of 1971. As compared to students from the control school and the general high school, the students from the area vocational school were better informed about career choice and demonstrated more positive attitudes toward their abilities and chances for vocational advancement. However, changes in vocational interests were more closely related to grade level than to school programs. Parents of the vocational students were the most favorably impressed with the school's career exploration program. (RIE)

A comprehensive research guide to aid the development of new careers programs in human service. Volumes I-IV. New York, New York: New York University, New York Graduate School of Social Work, n.d. (ED 063 506)
EDRS Price MF-$0.65 HC-$9.87

This 4-volume research guide to New Careers programs, which was derived from personal interviews with approximately 100 respondents in individual and group sessions, is intended to serve a variety of uses, such as: (1) to encourage program planners and operators to utilize research as a means of contributing to problem solving, and (2) to stimulate and assist those researching various aspects of New Careers programs. The contents, which reflect many of the major suggestions and needs expressed by those who are involved in some aspect of New Careers programs, are organized in the following volumes: (1) Assessing the Impact of the New Careers Program, which proposes research studies that deal with considerations necessary for launching a New Careers program, (2) The Design and Operation of New Careers Programs, which

proposes research studies that deal with ongoing operational problems of New Careers programs, (3) Assessing the Impact of the New Careers Program, which proposes research studies to assess the success of the total program rather than the effectiveness of individual components, and (4) Implications of the New Careers Program for the Field of Education, which cites areas where research efforts may be applied to planning and operation activities of New Careers educational projects to suit the needs of those served. (RIE)

Comprehensive vocational guidance program for model cities. Interim report. Indianapolis, Indiana: Indianapolis Public Schools, 1972. (ED 066 584)
EDRS Price MF-$0.65 HC-$6.58

The purpose of this project was to develop a comprehensive vocational guidance program which would: (1) expose students to a wide range of vocational experiences, (2) upgrade the self-image of disadvantaged students, (3) increase the vocational awareness of students, educators, and community members, and (4) provide students with employable skills prior to termination of their education. During the first year of operation, the following accomplishments were achieved: (1) Counselors are working in elementary and junior high schools which never had the services of a counseling program, (2) Students are able to see vocational opportunities first hand and observe people actually working, (3) Parents more readily accept vocational education along with academic education, (4) Students are more aware of vocational classes, are able to make wiser educational decisions, and are more aware of the need for at least a high school education, and (5) Administrators, teachers, students, and parents have come to accept counseling as a part of the regular educational program. The activities leading to these accomplishments are discussed, and sample curriculum materials are appended. (RIE)

The continuation of the South Carolina Research Coordinating Unit of Vocational Education (November 1, 1971 - July 31, 1972). Progress Report. Columbus, South Carolina: South Carolina State Department of Education, 1972. (ED 066 590)
EDRS Price MF-$0.65 HC-$6.58

This progress report on the activities of the South Carolina Research Coordinating Unit of Vocational Education from November 1, 1971 through July 31, 1972 outlines its major accomplishments, detailing the results of vocational education surveys and presenting a career education plan and time schedules for the research projects in the extensive appendixes. Comprehensive school surveys of vocational education were conducted in seven districts, curriculum guides in 14 occupational areas and a microfilm career information system were developed with research grants, and a federally funded pilot project for a comprehensive career education program will be implemented in 1972. Projects on adult vocational education improvement, job placement, and guidance counselor in-service training will continue, as will the development of an operational plan for the Research Coordinating Unit. Two manpower reports by the state Employment Security Commission were disseminated and technical assistance was provided to local school districts. (RIE)

Culberson, J.O. and Scheer, R.A. How can exploratory experiences and other training devices be used to develop the optimum occupational orientation program for Mississippi? Final report. Hattiesburg, Mississippi: University of Southern Mississippi, 1972. (ED 073 293)
EDRS Price MF-$0.65 HC-$3.29

The concept and structure of career education was investigated in order to plan and develop appropriate "real-life" vocational exploration programs for Mississippi. This federally-funded research project was carried out by visiting exemplary programs and five vocational program-planning settings throughout the United States, as well as a review of occupational orientation literature. An interrelated project being conducted at the same time consisted of a survey of 54 state and territory project directors requesting instructional materials for career education. The survey resulted in a disappointing quantity and quality of materials, and this scarcity was attributed to the incomplete nature of program development in career. It was recommended that career education planning and implementation for Mississippi begin immediately, with pre- and in-service teacher educator training, coordination at the state and school district levels, and the appointment of a state

director in career education. Annotated descriptions of 36 documents deemed valuable for Mississippi program development in the area of "real-life" occupational exploration are included. (RIE)

Daane, C.J. Vocational exploration group - theory and research. Tempe, Arizona: Studies for Urban Man, Inc., 1971. (ED 062 664)
EDRS Price MF-$0.65 HC-$3.29

Vocational Exploration Groups (VEG) is a program for aiding both youth and adults in to increasing clarification of their position in the occupational world. It is designed to lead an individual to personally supportive first choice of an occupation or to a reconsideration and a rechoice. The process consists of 27 steps within 5 phases of (1) inclusion, (2) job inventory, (3) job personalization, (4) the expansion of jobs personalized, and (5) the next step. The process is conducted for small groups of 5 people by a trained facilitator of the group process. Leaders use a kit of materials and a leader manual to guide group members through the various steps. In the studies reported, 195 trainees and leaders gave their attitudes and impressions of the effectiveness and functionability of the VEG program. Also, 825 Employment Service applicants experienced a three-hour group session in Vocational Exploration. Randomly assigned control were also used. Experimental groups when compared with control groups obtained twice the number of jobs during the month and showed more movement into training and from work training to jobs. (RIE)

Dunn, J.A. The AIR career education curriculum development project. Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1972. (ED 072 259)
EDRS Price MF-$0.65 HC-$3.29

This paper presents an overview of a project concerned with the design and development of a comprehensive career education curriculum with sufficient detail and flexibility to be used in the majority of elementary and junior high schools throughout the nation. The principal products to be developed include a catalog of instructional objectives, a series of

curriculum guides, and a series of sample teaching-learning units. Other products will be an instructional systems model, a dissemination model, a local evaluation instrument, and various training materials and project reports. To date, the scope of the project and the domain of behavioral objectives for the program have been defined. The economic constraint in the implementation of career education is commented on. Charts developed to reflect the curriculum topics and content coverage are appended. (RIE)

Elementary school industrial arts interaction technology for children. A positive approach to education for a changing society. Baton Rouge, Louisiana: Louisiana State Department of Education, 1972. (ED 061 444)
EDRS Price MF-$0.65 HC-$3.29

Prepared by the vocational education division of a state department of education and compiled by industrial arts educators, this resource guide provides a conceptual basis for the elementary teacher using industrial arts as a means of introducing children to industrial processes and orienting them to the physical and material world. Included in the guide are manipulative activities and experiences that will help to broaden the child's knowledge about the interdependence of people and the world of work as it involves them and their families. Seven categories of elementary industrial arts programs are briefly outlined: limited and comprehensive classroom, laboratory, traveling teacher, mobile and central laboratory, and summer school enrichment programs. An example of a resource unit for primary level is given in detail including: (1) purposes, (2) learning activities, (3) skills developed, and (4) resource materials. Included in the guide are: (1) a list of safety rules for the teacher, (2) source of supplies, (3) an evaluation checklist, (4) suggestions for furniture, (5) an outline for organizing instructional plans and (6) one for studying basic raw materials of industry. (RIE)

Exploring occupations. Guidelines for implementation of programs of occupational exploration and awareness in Delaware schools under HB 509. Dover, Delaware: Delaware State Department of Public Instruction, 1970. (ED 057 234)
EDRS Price MF-$0.65 HC-$6.58

The intent of H.B. 509 is "to offer an incentive to all the school districts in the state to expand their occupational-vocational offerings so that a higher percentage of high school pupils will be work oriented and trained to become productive citizens." One of the objectives of this institute was to review some of the approaches to work orientation being used or proposed in the Delaware School System, and to: (1) orient counselors to the ramifications of H.B. 509, (2) develop guidelines for implementation of programs of occupational exploration and awareness, (3) provide a forum for counselors to discuss common problems and to exchange ideas for means of providing occupational information, and (4) review such basic tools of occupational guidance as the Dictionary of Occupational Titles and the General Aptitude Test Battery. Programs were presented, reviewed and discussed. (RIE)

For those developing world of work resource units for elementary school teachers. De Kalb, Illinois: Northern Illinois University, n.d. (ED 062 519)
EDRS Price MF-$0.65 HC-$6.58

This package of practical ideas collected by the Authentic Basic Life-Centered Education (ABLE) Model Program should be useful for teachers and administrators who are revising curriculums and writing curriculum guides for the elementary and intermediate level. Suggested units are based on an "organizing center concept" such as banking, baking, and the telephone business, and divided into groupings of: (1) resources (accessibility)--what tools, materials, and human talent can be used to make a unit accessible to the child, (2) content (mobility) --how can the subject material pull together new relationships from past studies, or enable children to encounter the fundamental activities of the community, their religion, their culture, and (3) performance (accomplishment)--how can the child express himself, use different resources, and show others what he has learned. Materials have been tested, evaluated, and revised in a variety of classroom settings. Other materials provide information on (1) interviewing, (2) field trips, (3) staff development activities, (4) career lattices, and (5) 70 suggested classroom activities for occupational exploration. Objectives are clearly stated and activities stress use of all resources, such as role-playing, field trips and community resources. (RIE)

Related Reference:

Introducing career education to teachers: A handbook for consultants, workshop leaders, and teacher educators. Springfield, Illinois: Illinois State Board of Vocational Education and Rehabilitation, 1972. (ED 067 487)
EDRS Price MF-$0.65 HC-$6.58

Frazier, W.D. Teachers with ideas--in action. A report of mini-grant projects approved in 1971. Stillwater, Oklahoma: Oklahoma Vocational Research Coordinating Unit, 1972. (ED 068 666)
EDRS Price MF-$0.65 HC-$3.29

This publication provides a descriptive report of 24 mini-grant proposals funded by the Oklahoma Research Coordinating Unit to secondary teachers and counselors. Each report includes: (1) the director(s) and title(s), (2) school affiliation, (3) school administrator, (4) estimated cost of the project, (5) summarization of activities, (6) illustrations of products or examples of materials if any were generated in the project, (7) dissemination activities following completion of the project, and (8) some editorial comments regarding the apparent success or failure of the project. Of the 24 projects, 10 proposed to develop curriculum materials, five resulted in new programs or a new unit in an existing program, and seven others resulted in development of techniques new to the investigators. A total of 18 investigators were successful in reaching their project objectives. It was concluded that vocational teachers and counselors are competent in conducting research and development projects which lead to improved practices in their teaching, and the mini-grant program is an efficient and economical technique for use as a change catalyst. Several recommendations were made, and the major proposal for the mini-grants is appended. (RIE)

Gingerich, G.E. School-based job placement service model: Phase I, planning. Final report. Brownstone Area Vocational-Technical School, Pennsylvania, 1972. (ED 069 887)
EDRS Price MF-$0.65 HC-$3.29

To assist school administrators and guidance personnel in providing job placement services, a study was conducted to: (1) develop a model design for a school-based job placement system, (2) identify students to be served by the model, (3) list specific services provided to students, and (4) develop job descriptions for each individual responsible for operating the system. Forming the developmental basis for the school-based job placement model are these components: (1) the overall educational system, (2) job openings developed cooperatively by the educational system and the Bureau of Employment Security, (3) cooperation between the educational system and the Bureau of Employment Security in matching students with employment opportunities, (4) follow-up of students, and (5) feedback of information to provide input for program improvement. The model is specifically concerned with that part of a differentiated guidance staff charged with the responsibility of working cooperatively with the Bureau of Employment Security in job development and job placement. This handbook describes the procedures followed in developing the model, implementation strategies, securing information about student's characteristics and job requirements, developing a computerized career planning and job matching system, and evaluating a job placement service system. (RIE)

Granger, K.M. Junior high career guidance curriculum--student-centered occupational preparation and exploration (SCOPE). Student workbook. Salt Lake City, Utah: Utah State Board of Education, 1972. (ED 065 687)
EDRS Price MF-$0.65 HC-$9.87

This tentative student workbook provides occupational guidance for students in Grades 7, 8, and 9 by means of nine units focusing on self appraisal, general educational and vocational awareness, and specific career and school planning. A wide variety of worksheets includes reading materials, tests, vocabulary lists, games, check lists, and resource materials.

A guide for the development of career education. Charleston, West Virginia: West Virginia State Department of Education, 1972. (ED 073 253)
EDRS Price MF-$0.65 HC-$3.29

Intended as a guide to acquaint interested persons with the facts and developmental efforts surrounding the career education concept, this publication provides: (1) a definition of career education, (2) the goals and objectives of the program, (3) concepts upon which career education is based, (4) suggested action steps for developing a career education program, (5) components of career education, which includes the school, community, and family, (6) developmental procedures governing implementation, (7) suggested learning activities for elementary, secondary, and adult levels, (8) an overview of the programmatic scheme, and (9) evaluation techniques. Several sample worksheets illustrating the flow of development are included, and additional forms and instructions for using the worksheets are appended. (RIE)

A guide for teachers of a course in career exploration, grades 8-9-10. Stillwater, Oklahoma: Oklahoma Vocational Research Coordinating Unit, 1970. (ED 049 356)
EDRS Price MF-$0.65 HC-$6.58

Developed by counselors and teachers in a workshop setting, this teaching guide should be of value in planning and implementing a course in career exploration. Designed for use in grades 8, 9, and 10, the guide presents creative ideas for the following units: (1) Know Yourself, (2) World of Work, (3) Use of Occupational Information, and (4) Career Educational Planning. Each unit includes stated objectives, suggested activities, evaluation techniques, and sources of recommended instructional materials. Arranged in a four-column format, the guide also includes check lists, illustrations, sample forms, and a publisher index. (RIE)

Guidelines for the operation, demonstration, evaluation and diffusion of a model for a comprehensive career education program in North Carolina, K-14. Lenoir, North Carolina: Caldwell County Public Schools, 1972. (ED 073 308)
EDRS Price MF-$0.65 HC-$3.29

These guidelines for developing a model for an integrated comprehensive career education program in North Carolina at the elementary and secondary levels include a mission statement, a career education ration-

ale, a wide range of educational objectives, and key considerations for statewide implementation of the career education concept. An advisory committee of leaders from business and industry, the professions, parents, and teachers will provide feedback from the home and community and will help coordinate community resource persons and activities. A multimedia approach will involve students in "real-life" activities that focus on self-understanding, career awareness, and the development of positive attitudes. Special programs for the disadvantaged, cooperative programs, and evening high school pilot programs for students with special needs will be provided at the secondary level. A curriculum planning program, articulation planning, and a career choice guidance program will provide information for target school personnel. Long-range diffusion activities will be carried out by city and county administrative and supervisory personnel. Included in the guide are suggested exploratory learning activities, teaching procedures, and resource lists. (RIE)

Herman, T.C. A curriculum designed for a career exploration program in the distributive occupations for the tenth grade secondary student. Final report. Hartford, Connecticut: Connecticut Vocational Education Research Coordinating Unit, 1972. (ED 070 844)
EDRS Price MF-$0.65 HC-$3.29

This description of the curriculum development and design for an introductory two-semester Grade 10 curriculum for marketing and distributive occupations includes program objectives, a course outline, and a program rationale. Occupational orientation in the first semester precedes individualized exploration of careers in distributive occupations during the second semester. This curriculum is intended to provide for earlier and greater career awareness by students in distributive vocational education and to develop job entry skills. Preliminary project procedures include: (1) surveys of the business community and high school student body to identify job competencies and vocational needs, (2) a comparative analysis of this information, (3) collection of pertinent data from the Connecticut Department of Labor, and (4) the gathering of information concerning student job preferences for occupational guidance purposes. This state and locally funded goal-oriented curriculum design is recommended for

adoption as a pilot project in 1973 at Wolcott High School in Connecticut, with successful implementation leading to state-wide adoption by local school systems. (RIE)

Intensive vocational services in guidance, counseling, placement, and follow-up. Final report. Kingwood, West Virginia: Preston County Board of Education, 1972. (ED 070 855)
EDRS Price MF-$0.65 HC-$6.58

This federally funded exemplary project in vocational education for an Appalachian county in West Virginia focused on developmental career planning for disadvantaged students in nine county high schools. Specifically concentrating on an integrated vocational curriculum for Grades 9 and 10, teacher-developed units were designed to orient Grade 9 students to the area vocational school and to the world of work. Students were given aptitude tests, and teaching techniques such as field trips, human resources, and audiovisual aids were employed. Post-testing after the 10-week orientation revealed student vocational interests, and the program evaluation indicated a need for an expanded vocational curriculum for Grade 10. Seven hours of in-service credit were given to the teachers, guidance counselors, consultants, and coordinators involved in curriculum development. A committee for program review and an advisory council acting as consultants for industry discussed the units. A 1-day personnel orientation meeting was held, during which a county-wide uniform grading system was developed. A sample curriculum unit and other resource materials are included. (RIE)

Investigating career opportunities. Curriculum guide. Little Rock, Arkansas: Little Rock Public Schools, 1972. (ED 072 308)
EDRS Price MF-$0.65 HC-$13.16

This curriculum guide, developed by a project committee of administrators, supervisors, instructors, and a counselor in the areas of industrial and vocational education, contains three extensive 12-week laboratory units at the junior high school level covering careers in the occupational clusters of business education, home economics, and industrial education. Funded under the Vocational Education Amendments of 1968, this course is intended to provide an overview of career

opportunities, techniques for self-appraisal, and help in choosing courses leading to the students' occupational goals. In a 2-column format, teaching procedures are correlated with resource lists of transparencies and student handouts included with each unit. A course rationale, appended student work-sheets, time allotments, and detailed behavioral objectives are provided. Final evaluation questions are given for each unit.

Jesser, D.L. Annual report to the policy board and the Ford foundation (Nevada western states small schools project, 1965-66). Carson City, Nevada: Nevada Western States Small Schools Project, 1966. (ED 060 969)
EDRS Price MF-$0.65 HC-$3.29

The annual report of the initial year of operation of the Nevada Western States Small Schools Project describes the project activities in relation to the implementation and continuing development of programs and the identification of problem areas and possible solutions for small schools. Programs described are: (1) an art-by-telephone program designed to demonstrate that specialized courses can be taught effectively in schools remote from the teaching source; (2) ar in-service education program by telelecture designed to demonstrate that college-level courses can be taught simultaneously from a university or college site to widely scattered areas; (3) a specialized in-service education program using the amplified telephone, visuals, prepared materials, etc.; (4) an elementary foreign language project (Project LEEP) designed to determine the effectiveness of certain educational materials needing a minimum of teacher specialization; and (5) a career selection education program designed for smaller high schools to provide the students with information relating to the world of work. Additional major activities include the sponsorship of workshops and demonstrations of an in-service nature to acquaint both teachers and administrators of small schools with emerging technological media, existing educational media, and emerging concepts of instruction. (RIE)

A job placement and group vocational guidance program for culturally deprived high school youth. Phase I, June 28, 1968, through June 30, 1969. Houston, Texas: Vocational Guidance Service, 1969. (ED 048 446)
EDRS Price MF-$0.65 HC-$3.29

This report on the first year's operation of a program providing group counseling and placement services for disadvantaged youth in Houston, Texas, outlines the development of relationships with schools, business, labor, students, and other agencies. It includes an overview of materials presented to the students and techniques used in the presentation. Despite the success of the first year, the program can be improved by increasing individual counseling and cutting the 30-week group program to 18 weeks. Suggestions are made in program developmental sequence to help guidance program administrators establish similar programs elsewhere. (RIE)

Jolly, W.W. (ed.) Hands on. A comprehensive program of career orientation for high school students. Knoxville, Tennessee: Knox County Department of Public Instruction, Department of Vocational Education, 1971. (ED 064 501)
EDRS Price MF-$0.65 HC-$9.87

This publication is the completed portion of the high school segment of a comprehensive program for contemporary curriculum design in vocational education. The entire program embraces career development curriculum for Kindergarten through Grade 12 and utilizes extensive teacher-student participation in the development of instructional materials. This document presents completed materials of the planned four major units of: (1) self-awareness, (2) occupational information, (3) work attitudes, and (4) job exploration with hands-on experiences. The first chapter is devoted to a discussion of career orientation including statements of philosophy and objectives. The second chapter includes instructional material for the unit on job exploration with hands-on experiences. Specific topics include: (1) Appliance Service, (2) Auto Industries, (3) Commercial Foods, (4) Health Occupations, (5) Ornamental Horticulture, and (6) Welding. Pertinent questions and answers regarding general occupation information, and illustrated activities are presented for each topic. (RIE)

Kennedy, E. and Williams, L. (eds.) Synopsis: Career education in Kentucky. Lexington, Kentucky: Kentucky University, Division of Vocational Education, 1973. (ED 072 190)
EDRS Price MF-$0.65 HC-$3.29

The main purpose of this booklet is to review and synthesize the historical background of career education in Kentucky and the current status of state-supported career education projects. An overview is presented of the efforts that have been made to implement the concept of career education in Kentucky, hoping to encourage other school systems in the state to further explore and implement their own career education programs. Data were collected by interviews, site visitations, and a survey form which was devised to elicit specific information about the projects from the project directors. Responses to the survey were put in a standardized format and a draft copy was returned to each project director for final editing. This procedure provided for the accuracy that was needed. While some of the projects may have changed since the submission of the descriptive material, the thumbnail sketches provided by the project directors do represent an accurate picture of state-supported career education efforts in Kentucky. (RIE)

Korizek, W.A. The next step--a comprehensive program in occupational preparation and placement. Interim report. Helena School District 1, Montana, 1971. (ED 060 187)
EDRS Price MF-$0.65 HC-$6.58

The purpose of the project was to find ways to bring about the implementation of more career education and occupational information in all levels of education. Specific objectives of this project include: (1) broadening occupational orientation at the elementary and secondary levels, (2) preventing dropouts, (3) developing opportunities for work experience, and (4) providing more vocational guidance services. Approximately 30 occupational and career units have been developed for use in Grades 1-6, and resource people from the community have been used extensively. The project during the first year involved approximately 65 teachers and 1,475 students. Field trips were used as a means of increasing the awareness of students of certain occupational opportunities. The

project has a sound base from which to progress, community facilities have been used wisely, and project staff are in great demand to give presentations. More staff, better dissemination methods, opportunities for teachers to observe other programs, and increased library materials on career education are included in recommendations for the second year of operation. More than half the report consists of appended materials relating to the project. (RIE)

Kraft, R.H.P. Perspectives on progress: Career education in Florida; statewide evaluation of vocational-technical education 1970-1971. Tallahassee, Florida: Florida State University, Department of Educational Administration, 1971.

In preparing this evaluation report, the Florida State Advisory Council on Vocational and Technical Education believed that evaluation should (1) focus on the people and their needs, (2) look into all parts of the human resources development program of the State, and (3) identify the employment opportunities within the State and the vocational services required. Among the findings are: (1) Effective programs in guidance and counseling require full support for implementation, (2) There is a very positive return on investment in vocational-technical education both to the individual and to society, (3) Community college level programs for the disadvantaged are more diversified and comprehensive than secondary level programs, and (4) Employers are not completely happy with the products of Florida's schools. Recommendations concern: (1) better publicizing, (2) work experience programs for counselors, (3) accurate labor market supply and demand information, (4) occupational programs at the secondary and presecondary level, and (5) adequate funds for vocational guidance. (RIE)

Lee, J.S. Occupational orientation: An introduction to the world of work. Jackson, Mississippi: Mississippi Research Coordinating Unit for Vocational-Technical Education, State College, 1971. (ED 057 235)
EDRS Price MF-$0.65 HC-$9.87

Developed by curriculum coordinating unit staff, this study guide was designed for use by students in occupational orientation classes. Intended

to serve as a central core around which class activities may be structured, the guide includes 17 units on topics such as: (1) Determining the Importance of Work, (2) Understanding the Present World of Work, (3) Preparing for a Career, (4) Exploring Outdoor Occupations, (5) Exploring Science Occupations, (6) Exploring Arts and Entertainment Occupations, (7) Locating and Applying for a Job, (8) Selecting a Career, and (9) Working on the Job. Each unit includes pertinent background information, review questions, and suggested activities. It is hoped this material will help students make intelligent career plans and decisions. (RIE)

Middle school: World of work, vocational self-concept and career planning. Final report. Hartford, Connecticut: Hartford Public Schools, 1972. (ED 068 667)
EDRS Price MF-$0.65 HC-$6.58

The goals of the first phase of a career exploration project were to change attitudes toward the world of work, upgrade values, and improve the self-concepts of approximately 550 Grade 7 and 8 disadvantaged youth in two Hartford middle schools. This was accomplished through a number of experiences and activities developed in five classroom units and three counseling procedures. The classroom units focused on distribution, manufacturing, office, health service, and general service occupations, while the vocational counseling techniques were concerned with self-concepts, interests, and the decision making process. Early in the project, a broad-based advisory committee representing the major industries and employers in Hartford was established. The teachers and counselors participating in the project and the advisory committee formed six sub-committees, and each sub-committee developed a unit covering their particular occupational cluster. The project did not accomplish all its goals but a beginning was made. In subsequent years the project will be projected down into the elementary grades and up into the secondary schools with the aim of developing a comprehensive K-12 program. (RIE)

Mietus, W.S. and Stilling, C. The Maryland career development project. First annual interim report phase I and appendix. Maryland University, College Park, 1971. (ED 057 251)
EDRS Price MF-$0.65 HC-$9.87

This interim report was prepared by a third party evaluation team in order to relate component objectives to: (1) input resources and conditions, (2) process treatment and transactions, and (3) output products and performance. Project activities were intended to: (1) input resources and conditions, (2) process treatment and transactions, and (3) output products and performance. Project activities were intended to: (1) Develop teachers in five metropolitan area elementary schools to help youngsters learn about themselves and the world of work, (2) Develop counselors, administrators, and specialists who can implement career exploration activities. (3) Develop and implement computer and microfilm techniques to assist in placement services, (4) Develop and implement work oriented on the job programs, (5) Develop and implement a television series on career exploration, and (6) Develop and disseminate a career resource notebook. The project also includes an exemplary program designed to: (1) bring counselors, home economics, and industrial arts teachers together so they can develop skills applicable to the career orientation process, (2) Assist these teams in working to create a plan for their own schools, and (3) supervise the plan implementation. Instruments and data summaries are appended. (RIE)

Miller, J.A. Concepts and processes in career development: The professional development research program. Rochester, New York: Rochester University, New York Management Research Center, 1972. (ED 068 727)
EDRS Price MF-$0.65 HC-$3.29

This conceptual framework for understanding the career development process defines career development as a continuous process of matching individual characteristics with organizational role requirements. Responsibility for achieving effective matching rests both with individuals and with organizations. The relative emphasis on individual efforts and organizational efforts over different phases of the career development process as a function of changing individual needs and role requirements. Summaries of research projects undertaken in the Professional Development Research Program are included. (RIE)

Miller, D.H. and Moore, A.B. Occupational cluster series. Abstracts of instructional and research materials. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1973.

This series identifies research and instructional materials in 15 occupational clusters. Documents were identified by means of computer searches of "Research in Education" from 1967 to December 1972. Instructions on how to use ERIC reference products are included. Intended for use in career education curriculum development, these abstracts include lists of descriptors, identifiers, and other pertinent information about documents in each occupational cluster. Cluster groupings are:

Arts and humanities (ED 073 260)
EDRS Price MF-$0.65 HC-$9.87

Communication (ED 073 276)
EDRS Price MF-$0.65 HC-$3.29

Construction (construction process) (ED 073 262)
EDRS Price MF-$0.65 HC-$6.58

Education (ED 073 279)
EDRS Price MF-$0.65 HC-$3.29

Finance (banking) (ED 073 278)
EDRS Price MF-$0.65 HC-$6.58

Government (administrative body) (ED 073 263)
EDRS Price MF-$0.65 HC-$3.29

Health (ED 073 280)
EDRS Price MF-$0.65 HC-$3.29

Manufacturing (ED 073 285)
EDRS Price MF-$0.65 HC $6.58

Natural resources (ED 073 261)
EDRS Price MF-$0.65 HC-$13.16

Personal (human) services (ED 073 282)
EDRS Price MF-$0.65 HC-$3.29

Product services (ED 073 283)
EDRS Price $0.67 HC-$9.87

Recreation and entertainment (ED 073 284)
EDRS Price MF-$0.65 HC-$6.58

Trade (marketing) (ED 073 277)
EDRS Price MF-$0.65 HC-$3.29

Transportation (ED 073 286)
EDRS Price MF-$0.65 HC-$3.29

Welfare (ED 073 281)
EDRS Price MF-$0.65 HC-$3.29

Moeller, C.A. and Cox, W.L., Jr. Development and evaluation of single concept film loops for dissemination of occupational information to youth in the middle school. Phase I. Final report. Raleigh, North Carolina: North Carolina State University, School of Education, 1971. (ED 051 637)
EDRS Price MF-$0.65 HC-$3.29

A total of 21 single concept Super 8 millimeter films, each four minutes long, were made that offered an on-site view of selected mechanical, industrial, and service occupations. The occupations selected to be filmed were considered to have growth potential and to be open to non-college bound students. It was found that the films could be photographed by a graduate student directly on 8 mm. film according to a professionally prepared script with little or no editing. This was important because the first three films prepared by a commercial studio proved to be too expensive. The sound track for the films was tape recorded on a cassette. Starting the film projector and the tape recorder at the same time provided a sufficiently synchronized effect for instructional purposes. When the films were shown to some 1322 middle-school students, the majority of the students rated tham as a good or excellent method of learning about occupations. The acceptance of the films varied somewhat with the sex of the student and the film content. The major criticism was the desire for more information. Their simple presentation form allowed the films to be used in an individualized instructional setting. (RIE)

Mogle, G. Vocational information for education and work (project VIEW--Utah schools). Salt Lake City, Utah: Utah State Board of Education, 1972. (ED 072 217)
EDRS Price MF-$0.65 HC-$3.29

To assess the degree of importance and use of the vocational information system, Utah "Project VIEW," as perceived by selected students and counselors in several Utah high schools and junior high schools during the 1971-72 school year, questionnaires were distributed to a random sample of 1,765 students from 16 high schools and 6 junior high schools as well as 24 counselors from those schools. Data obtained from the survey revealed that: (1) Only about half of the students sampled are making use of occupational career information, (2) Less than 14 percent were able to recognize the VIEW materials, (3) Less than 8 percent who were able to recognize sources of the information preferred to use the VIEW materials, (4) Students feel that VIEW materials received little use as compared to other career information; however, counselors felt just the opposite, and (5) The most recognized used source of career information is the SRA "Career Exploration Kit." Based on these findings, recommendations were made that: (1) the VIEW materials not be up-dated, (2) an effort be made to evaluate other career information sources superficially investigated in this study, (3) further studies be made to determine why VIEW materials are not used, and (4) in those schools where VIEW materials receive wide use, the "master-deck" be made available for reproduction. (RIE)

Morris, J.K. Implementing a career-centered curriculum in the public schools of Mississippi. Final report. Jackson, Mississippi: Mississippi State Board for Vocational Education, 1972. (ED 068 704)
EDRS Price MF-$0.65 HC-$6.58

In order to meet the primary goal of providing students in the public elementary and secondary schools of Mississippi with a career-centered curriculum, these objectives were developed: (1) to develop and integrate career education activities into the curriculum; (2) to include guidance, placement, and follow-up programs; (3) to provide students with salable skills or college preparation; and (4) to establish a local planning and evaluation program. A sequential approach features innovative teaching techniques, such as job simulations, which utilize role playing, resource speakers, occupational songs and games, and self-awareness activities. Also included are skill training programs in nine specific occupational areas, an open-ended continuing educational program, and both general and specific career

exploration activities. In-service teacher training programs, a school-community public relation program, decision-making activities, and the fused curriculum increased student interest, motivation, and program relevance. Continuation of the program was recommended. Extensive resource materials are included, as well as various suggestions for program improvement. (RIE)

McCracken, J.D. and Brown, A.J. Career education for disadvantaged students. Final report. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1973. (ED 072 204)
EDRS Price MF-$0.65 HC-$3.29

This project was conducted to provide local school administrators, teacher educators, and teachers with a synthesis of the literature and practice relating to the career education of disadvantaged students. Information was secured by visiting eight on-going career education programs, interviewing their program directors, corresponding with directors of promising programs, and reviewing the literature. In addition, a 1-day consultants workshop was held to strengthen the perspectives of the four project authors who developed papers for the three target groups covering the following topics: (1) descriptions of exemplary programs for disadvantaged students, which was developed for local school administrators; (2) research and theory related to the motivation of disadvantaged students, and curriculum materials for use with disadvantaged readers in developing their employment skills, which were developed for teachers; and (3) descriptions of methods and programs for preparing teachers, which was developed for teacher educators.

Related References:

Robertson, J.M. Career education programs for the disadvantaged. Appendix A of a final report. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1973. (ED 072 205)
EDRS Price MF-$0.65 HC-$3.29

Maxwell, D.K. and Others. Curriculum materials in career education for the disadvantaged. Appendix D of a final report. Columbus, Ohio: Ohio State Uni-

versity, Center for Vocational and Technical Education, 1973. (ED 072 208)
EDRS Price MF-$0.65 HC-$3.29

McLester, C. and Mahrt, J.L. Current report on career development projects, 1972-1973. Lansing, Michigan: Michigan State Department of Education, Division of General Education, 1972. (ED 073 295)
EDRS Price MF-$0.65 HC-$3.29

This directory provides abstracts for 38 career development projects operating during the 1972-73 school year, which are funded or coordinated by the Michigan Department of Education. The abstracts identify representative career development program components (e.g., objectives, major activities, and procedures) for projects in state school districts of varying populations and levels. (RIE)

McMinn, J.H. The career-centered curriculum for the vocational complexes in Mississippi. Interim report. Jackson, Mississippi: Mississippi State Board for Vocational Education, 1971. (ED 059 395)
EDRS Price MF-$0.65 HC-$6.58

This project was designed to develop and demonstrate to teachers, administrators, and the public, a coordinated and integrated program of career development from Grade 1 through post-secondary vocational-technical education, in order to give impetus to the development of career-centered curriculums for vocational complexes in Mississippi. The procedure views the levels of occupational education as a pyramid, with students making decisions about careers based on broad exploratory experiences and counseling. As choices are narrowed the experiences become more intensified. A remedial program is operated for students who are identified as potential dropouts in order to equip them with the competence and skills necessary for pursuing further vocational training. It was concluded that the exemplary project made important progress in developing skills which will serve as a basis for continuous growth and advancement in chosen careers, and it was recommended that funding should be continued for the second year of operation. (RIE)

Occupational orientation: An introduction to the world of work. Teachers handbook. Preliminary draft. Mississippi State University, State College. Curriculum Coordinating Unit, 1969. (ED 050 279)
EDRS Price MF-$0.65 HC-$9.87

Developed by curriculum coordinating unit staff, this teacher's handbook was prepared for use in planning and implementing a course in career orientation. Material for the course is divided into eight instructional units which correspond to Roe's eight categories, namely: (1) Service, (2) Business Contact, (3) Organization, (4) Technology, (5) Outdoor, (6) Science, (7) General Culture, and (8) Arts and Entertainment. The course is recommended for the ninth grade level with an enrollment of from 10 to 20 students per class. The instructional procedure includes an overview phase, a transition phase, an exploration phase, and a projection phase. This final phase is expected to develop the student's ability to project an educational program designed to yield successful occupational entry and advancement. Also included in this handbook is information on testing, student objectives, teacher objectives, and suggested activities. (RIE)

OE initiatives in career education. American Education, 1972, 8(7), 36.

This one-page breakdown of where the educational initiatives (in dollars) lie for 1972 and 1973 includes a chart detailing present and future federal expenditures on career education. The description includes utilization plans for NIE, new federal legislation and projected programs.

Olson, L.A. Career development components in vocational education: A diagrammatic model K-12. Huntington, West Virginia: Marshall University, Department of Vocational-Technical Education, n.d. (ED 064 509)
EDRS Price MF-$0.65 HC-$3.29

Information for the model contained in this paper was obtained through contacts and personal association with many educators and practicioners whose concern has been the need to provide information and experience to students about occupational and educational

alternatives. Planned educational experiences that relate to occupations and that are provided by elementary and secondary teachers constitute the components of the career development education described in this document. These experiences include decision-making experiences, industrial visits, counseling, career games, simulations, and periodic career conferences. Components of the model are: (1) Career Awareness (for grades K-6), (2) Career Orientations (for Grades 7 and 8), (3) Career Explorations (for Grades 9 and 10), and (4) Career Preparatory (for Grades 11 and 12). A bibliography categorized by service areas is included. (RIE)

Related References:

Olson, L.A. (ed.) Career awareness education: Introduction, instructional resource units, and annotated bibliography. Huntington, West Virginia: Marshall University, Department of Vocational-Technical Education, n.d. (ED 064 510)
EDRS Price MF-$0.65 HC-$6.58

Olson, L.A. Career exploration: Instructional materials, evaluative results and innovative programs. Huntington, West Virginia: Marshall University, Department of Vocational-Technical Education, n.d. (ED 064 511)
EDRS Price MF-$0.65 HC-$3.29

Peterson, M. and Others. The OCCUPAC project (a project to develop occupational information learning activity packages for grades K-9). Final report. Charleston, Illinois: Eastern Illinois University, Center for Educational Studies, 1971. (ED 055 225)
EDRS Price MF-$0.65 HC-$16.45

During Phase I of a two-phase project, 15 OCCUPACS (learning activity packages) were developed, pilot tested in a university laboratory school, field tested in four public school systems, revised, and submitted to professionals for final review. Intended to provide occupational information to children in Grades K-9 at different levels of difficulty, each OCCUPAC contains multi-media materials in the form of slides, tapes, equipment, and materials used in different occupations, decision-making simulation activities, and other props. Some recommendations resulting from Phase I activities are: (1) Students seem to prefer using the OCCUPACS on an individual or small group basis, (2) Other occupational infor-

mation activities such as field trips should be included into the OCCUPAC program, (3) Teachers using the OCCUPACS need instruction concerning individualized instruction, career development, how to use information techniques with the packages, and counseling, interviewing, and listening techniques, (4) More OCCUPACS representing a variety of occupations should be developed, and (5) Effective preservice and in-service procedures need to be developed for orienting teachers and counselors to K-9 occupational information. Tape scripts for each of the 15 OCCUPACS are appended. (RIE)

Related References:

Peterson, M. Career education in the elementary school. Presentation at Office of Education Vocational Association, Washington, D.C., October 20, 1972. (ED 068 714) EDRS Price MF-$0.65 HC-$3.29

Peterson, M. OCCUPACS for hands-on learning; multimedia packages. American Vocational Journal, 1972, 47(1), 40-1.

Ploughman, T.L. Project: Pontiac vocational career development program; evaluation report. Pontiac, Michigan: Educational Services and Products, Inc., 1971. (ED 053 331) EDRS Price MF-$0.65 HC-$3.29

During the 1970-71 school year the Pontiac School District operated a vocational career development program to increase the occupational knowledge and self-concept of students. Evaluation of that first year pertained to context, input, process, and product. A description of the program, its results, and research procedures is included. Three major findings were: (1) Students showed significant gain in their level of occupational knowledge, (2) Upper elementary children showed greater gain in occupational knowledge than did lower elementary children, and (3) At the end of the program students selected occupations of higher rank than they did at the beginning of the program. (RIE)

Related Reference:

Rochow, R.J. Pontiac vocational career development program. Interim report. Pontiac City School District, Michigan, 1971. (ED 058 413) EDRS Price MF-$0.65 HC-$19.74

Project CAREER/career development process for the handicapped. Interim report (July 1, 1972-November 15, 1972). Boston, Massachusetts: Massachusetts State Department of Education, Division of Occupational Education, 1972. (ED 070 824)
EDRS Price MF-$0.65 HC-$6.58

This interim report covers the first phase of Project CAREER, which is a federally funded exemplary project in vocational education focusing on the career development process for the handicapped. An interdisciplinary career education team for each of three local education agencies (LEA's) was established, composed of a special education teacher, a vocational teacher, and an academic teacher. Coordinated by an occupational resource specialist in each LEA, the team's orientation was accomplished at a 1-week summer conference and 4-week workshops in each LEA. Preliminary planning was done for developing a career education resource center and integrated career education curriculums for handicapped students. Behavioral objectives and performance objectives are being developed and examined, a pilot demonstration unit will be presented in October 1972, and community support is being enlisted. Short courses for in-service training and pre-service college courses have been developed. A program evaluation by a third part evaluator, conclusions, recommendations, and a wide range of resource materials are provided. (Illustrations deleted due to marginal legibility.) (RIE)

Project VIGOR: Vocational cluster education, integrated and articulated, grades 1 through 14 with guidance services, occupational exploration and work experience, relevant to general education. Final evaluation report. Portland, Oregon: David Douglas Public Schools; Salem, Oregon: Oregon State Board of Education, Division of Community Colleges and Career Education, 1972. (ED 067 511)
EDRS Price MF-$0.65 HC-$3.29

To determine the knowledge level and attitudes of Project Vigor staff and to develop a base for further planning and implementation, nine separate questionnaires were used to collect data from administrators, teachers, and counselors at specific grade levels. It was found that significant progress had been made toward meeting the overall project goal of creating

a career education program in a formerly traditional school system, the David Douglas Public Schools in Portland. Major strengths of the program centered on the career clusters in the high school, the work experience program, and the career awareness program in the elementary grades. However, the critical problem was a lack of understanding by the majority of the staff of the total concept of career education. Exploratory programs, particularly at the junior level, and additional materials, principally cluster programs and guidance and counseling services, are needed. Future evaluation would be enhanced by the development of objective indicators of achievement and performance. In addition to the questionnaires and data analyses, the appendixes include the complete report of a special evaluation activity designed and conducted by a senior class student who was also a member of the Project VIGOR advisory council. This activity centered on collecting information from ninth grade students about their knowledge and attitudes toward career education, and its findings are incorporated into the evaluation. (RIE)

Proposal for a mobile assisted career exploration unit. Logan, Utah: Utah State University, 1968. (ED 042 179)
EDRS Price MF-$0.25 HC-$2.15

A pilot program is proposed to determine if a mobile guidance unit operating on a limited time schedule can provide a feasible means for increasing maturity of rural ninth grade students. The program is based on the hypothesis that students interacting for a short period of time with a counselor and a counselor aid will enhance their vocational development as measured by an increase in vocational maturity. Two samples of ninth grade rural students who are generally without full time counseling are to be used (one as a control group). The program is designed to help the student acquire experience in two basic areas: (1) knowledge of self and the world of work and (2) practice in utilizing this knowledge in prevocational decision making. The student will be exposed to career information, given aptitude and interest tests and interact with the counselor in individual and group sessions. The proposal is designed to involve parents. Also included are outlines for career exploration schedules, evaluation designs and cost estimates. (RIE)

Research and development project for the establishment of career education: K-12 in regional district 13. Final report. Durham, Connecticut: Connecticut Regional School District 13, 1972. (ED 069 857)
EDRS Price MF-$0.65 HC-$3.29

A research and development staff consisting of six teachers from various disciplines, together with a school-community advisory committee comprised of members of the business community, parents, and students, was established to research a career education program for Connecticut Regional District 13. Through a literature review and the results of four surveys sent to teachers, parents, students, and industry, it was concluded that: (1) A need and interest for a career education program for Kindergarten through Grade 12 does exist; (2) This program should be integrated into the curriculum; (3) School-industry and school-community cooperation will permit work experience opportunities, provide resource materials, and provide advice, and (4) The program's success will depend on the establishment of curriculum committees, in-service teacher workshops and training, and the appointment of a qualified career education coordinator. General objectives and recommendations for the district are stated, followed by more specific objectives and recommendations for the elementary, middle, and high schools. For each objective, possible methods of implementation are outlined. A 4-phase career education program would include: (1) the development of a positive self-image, (2) awareness of the world of work at the elementary level, (3) vocational exploration for the middle grades, and (4) direct occupational experiences at the high school level. (RIE)

Rosenthal, D. and Agran, P. Introduction to allied health careers. Teacher's manual. Secondary school pilot and demonstration project. Los Angeles, California: California University, Division of Vocational Education, 1972. (ED 069 865)
EDRS Price MF-$0.65 HC-$19.74

This teaching manual covers a 1-year introductory program for Grade 10 for various allied health occupations as part of a 3-phase individualized, integrated curriculum entitled "The Health Care System," which includes work study and optional cooperative education. Field trips, field experiences, and explor-

atory work experience in health care facilities supplement classroom learning activities for these three modular units: (1) an orientation to the health care system, which provides an overview of its occupations, problems, and practices, (2) eight fictitious case histories which introduce students to the functions and responsibilities of health care personnel, and (3) three units dealing with preparation for field work at a hospital, the actual experience, and a summation unit. This federally funded pilot and demonstration project was developed by the project staff with the aid of a national advisory committee of leaders in the health care field. Instructions on using the manual and a discussion of the curriculum philosophy and design are included. Learning activities, teaching procedures, and general and specific behavioral goals and objectives are provided, in addition to resource and reference lists and materials. (RIE)

Rowe, F.A. Foundation for a seventh grade guidance unit: An analysis of the developmental level of the seventh grade student and nationally current occupational guidance classes. Final report. Salt Lake City, Utah: Utah State Department of Public Instruction, 1970. (ED 052 492)
EDRS Price MF-$0.65 HC-$3.29

This is a review of the relevant literature and current practices in the field of occupational guidance. Because it was prepared in connection with the beginning of a seventh grade occupational guidance class in Utah, it deals, in the first part, with the vocational-maturational level of seventh graders. The second part summarizes contemporary efforts and practices throughout the nation for occupational guidance on this level. Several guidance approaches are considered, but the developmental approach utilized by the New England School Development Council is included in its entirety because of its comprehensiveness. The report concludes with: (1) a list of guidance objectives; (2) activities and projects geared toward meeting those objectives; (3) a short bibliography of relevant educational materials; and (4) brief comments about guidance program evaluation. (RIE)

Springfield's trajectory occupational program: Report. Springfield, South Dakota: South Dakota University, 1972. (ED 069 861)
EDRS Price MF-$0.65 HC-$6.58

The Springfield Trajectory Occupational Program (STOP), designed to provide a 23-day residential occupational exploration program for 90 11th grade students from small South Dakota high schools, utilizes industrial field trips, self-evaluation, group and individual counseling, laboratory projects and dormitory activities in a multi-media approach to career planning. For each participant, a summary report was returned to his high school. The student-centered developmental program included in-depth exploration of six occupational areas, living in college housing with dorm "parents" and eating in college dining facilities. The project's success demonstrates that a summer residential approach for providing occupational, social, and personal development for students from rural areas is highly productive. Program descriptions, given separately for each of the 2 years, include participant and staff evaluations. Various program forms are appended. (RIE)

A statewide evaluation of vital information for education and work (VIEW). Los Altos, California: Tadlock Associates, 1972. (ED 073 239)
EDRS Price MF-$0.65 HC-$6.58

This study is the first statewide effort in California to evaluate the effectiveness of Vital Information for Education and Work (VIEW), which are occupational awareness materials available at 10 designated VIEW centers in the state. To determine factors affecting the utilization of VIEW, to better use VIEW as a guidance tool, and to develop a model VIEW system based upon findings by an outside consultant, this evaluation focuses on these aspects of VIEW from its inception in 1965 in San Diego County: (1) VIEW's original system, (2) the number of schools and students served by VIEW, (3) statewide pattern of operations among VIEW centers, (4) patterns of use of VIEW in schools, and (5) educator and student attitudes toward VIEW. A summary of 41 findings forms a basis for these general conclusions and recommendations: (1) Although the need for a career information system such as VIEW is well established, the theoretical advantages of VIEW

have been largely unrealized, (2) Statewide organization and planning are needed to coordinate and expand VIEW services at the secondary level, (3) In-service training in the use of VIEW for teachers and counselors is needed, as well as parental involvement, and (4) Equipment failures must be remedied. Numerous tables present the data. (RIE)

A tentative framework for developing comprehensive K-12 career education. Career education, K-12--the world of work. Austin, Texas: Texas Education Agency, 1972. (ED 067 503)
EDRS Price MF-$0.65 HC-$3.29

Prepared by the Texas Education Agency for use in integrating career education into existing school programs, this curriculum guide presents an overview and objectives of career education. Other sections of the guide discuss: (1) Implementing Career Education, (2) Career Education in the Elementary School, (3) Career Education in the Middle School, and (4) Career Education in the High School. Included in the appendixes is a listing of career fields and career education concepts. (RIE)

Thomas, H.B. and Others. Evaluation of an educational program for the rural disadvantaged. Research report. Urbana, Illinois: Illinois University, Division of Agricultural Education, 1970. (ED 061 425)
EDRS Price MF-$0.65 HC-$6.58

The objective of this phase of the Rural Education Disadvantaged Youth Project (Project REDY) was to evaluate the model vocationally-oriented educational program that was developed in an earlier phase of the research. This educational program focused upon (1) youth and career choices, (2) family financial management, and (3) improvement of family income. Based upon pre- and posttest data for a control group and an experimental group and upon data gathered from standardized instruments, interview schedules, and school records, results included information pertaining to: (1) family residence, (2) financial assistance, (3) characteristics of adults, (4) situation and goals of children, (5) parental desires for their children, (6) the home environment and (7) leisure time activities. One major conclusion

of the study was that a local school teacher can conduct an effective family-centered vocationally-oriented education program which will produce significant changes in the attitudes and situations of severely disadvantaged rural family members. (RIE)

Ullery, J.W. and O'Brien, R.K. Testing of the guidance program. Project ABLE; development and evaluation of an experimental curriculum for the New Quincy (Mass.) vocational-technical school. (ED 048 487)
EDRS Price MF-$0.65 HC-$3.29

The Project ABLE Guidance Program was designed to prepare junior high school students for making an appropriate and stable choice of a high school program. To determine the success of the program, an experimental and a control group were administered the Project ABLE Career Development Inventory prior to and after implementation of the guidance plan. The results of the testing program were inadequate, with many inconsistencies occurring in the data and on the student score sheets. Serious questions can be raised about proper administration of the pre- and posttest and use of the student kit materials, required reference, and multi-media support materials. Funds for the support of staff for the proper revision of the student kit materials have not been readily available. It is felt that further refinement of the materials and administrative procedures, better implementation, and a more exhaustive investigation of student performance will lead to more positive results. The Career Development Inventory and summary of test scores are appended.

Related Reference:

Ullery, J.W. Individualized instructional systems for vocational education: Project ABLE. Educational Technology, 1971, 11(3), 22-25.

Vocational guidance and career education programs: Report of 1969/71. Trenton, New Jersey: New Jersey State Department of Education, Division of Vocational Education, 1971. (ED 068 668)
EDRS Price MF-$0.65 HC-$3.29

Program activities inherent in and important to career education include such elements as school-industry cooperation, job placement, school-community coordination, and innovative instructional methods. This report contains abstracted descriptions of vocational guidance and career education programs in New Jersey. Presented first are brief summaries of the Hackensack Project, a preschool through adult career education model program, and of Governor Cahill's Career Development Pilot Project for the establishment of career education programs extending from the elementary grades through high school. The bulk of the report consists of descriptions of vocational guidance and job placement services in high schools, school-community coordination programs, multimedia techniques for career guidance, job placement and counseling training sessions at two state colleges, and special vocational guidance and counseling programs for disadvantaged students and school dropouts. All of the described programs may be used through planned expansion to build a fully articulated career education project in New Jersey. (RIE)

Wood, L.A. A career model for nurse practitioners. Allied health professions project. Los Angeles, California: California University, Division of Vocational Education, 1972. (ED 064 492) EDRS Price MF-$0.65 HC-$6.58

Described in this document is a five-stage curriculum model for the training of nurse practitioners which was developed through the Allied Health Professions Project (AHPP). Based on a national survey of nursing occupations, stage I of the curriculum model includes the 60 percent of activities common to all practitioners, and stage II includes the remaining or more complex skills. Stage III is designed to prepare teachers, administrators, or consultants for beginning faculty positions for stages I and II. Stage IV curriculum prepares teachers for faculty positions for stages II and III and administrators for large health agencies. Stage V prepares the nurse researcher at the doctoral level. This five-stage model can be used to increase competence in nursing practice, decision-making, and administrative and communications skills. (RIE)

Work experience education; research for accountability. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 719)
EDRS Price MF-$0.65 HC-$9.87

This extensive color-keyed program guide for general, exploratory, and vocational work experience education programs in California was developed by work experience coordinators, professors, state and local administrators, and various district teams to pilot test at the secondary and university levels. General, exploratory, and vocational goals are given separately, each including specific program goals and performance objectives. Terminal objectives, student performance criteria, and student record sheets provided for pre- and post-assessment purposes separately. Various work experience program forms are included. (RIE)

Related References:

Work experience education learning activity packages: Vocational goals 1-2. Sacramento, California: California State Department of the Youth Authority, 1971. (ED 068 720)
EDRS Price MF-$0.65 HC-$13.16

Work experience education; learning activity packages; exploratory goals 1-2. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 721)
EDRS Price MF-$0.65 HC-$6.58

Work experience education; learning activity packages: Vocational goals 3-5. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 722)
EDRS Price MF-$0.65 HC-$16.45

Work experience education; learning activity packages; general goals 1-2. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 623)
EDRS Price MF-$0.65 HC-$13.16

Work experience education; learning activity packages: Exploratory goals 3-5. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 724)
EDRS Price MF-$0.65 HC-$19.74

Work experience education; learning activity packages; exploratory goals 1-2. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 721)
EDRS Price MF-$0.65 HC-$6.58

Work experience education; learning activity packages: General goals 3-5. San Luis Obispo, California: California State Polytechnic College, 1971. (ED 068 725)
EDRS Price MF-$0.65 HC-$19.74

World of work career motivation. Curriculum guide for grades K-6. Ohio's career continuum program. Columbus, Ohio: Ohio State Department of Education, 1972. (ED 062 565)
EDRS Price MF-$0.65 HC-$9.87

Prepared largely by representatives of Pilot Career Motivation programs from nine Ohio school districts during a summer workshop and subject to correction, revisions, and additions by teachers, this curriculum guide is intended to assist the elementary teacher in implementing a career motivation program, which is the first phase of a 3-phase career development program and stresses the goals of awareness, appreciation, and motivation. Divided into three color-coded sections by grade level (K-2, 3-4, and 5-6), topics and objectives have been developed for three of the seven broad career development areas, including The Individual and His Environments, World of Work, and Self. Four additional areas will be developed. Each major career area is comprised of a series of units containing the following components: (1) developmental objectives for awareness, appreciation, and motivation levels, (2) behavioral objectives for cognitive, affective, and psychomotor domains, (3) activities which can be classified into levels (vicarious, simulated, and actual experience), integrated into the curriculum or identified as student units (independent, small group, or class), (4) sample lesson plans, (5) a coding grid which provides a reference to the suggested activities numbered in the units. A bibliography provides resources for teacher and child use. (RIE)

Chapter VII

LOCALLY DEVELOPED PROGRAMS AND APPROACHES TO CAREER EDUCATION

Compared to the previous chapter, the programs and techniques which follow were primarily developed at the local school level without the aid of external funding. The broad array of activities which are discussed is testimony to the creativity and initiative of many local school personnel. While these approaches tend to be limited in scope and objectives, they should be considered in total for their potential in assisting individuals to cope with the demands of various career developmental tasks.

Abner, G.A. and Adams, J.H. The student in pursuit of his own education. Illinois Career Education Journal, 1971, 29(1), 31-34.

This article discusses the possibilities of a kind of educational contracting where the student seeks and secures the teaching service and experiences he desires.

Adams, W. Career education: Turn students on in the middle school and junior high. Agricultural Education Magazine, 1973, 45(8), 174+.

This refreshingly definitive journal article elucidates a number of reasons for pursuing educational reform, and a plan for pursuing this ideal. A number of recommendations are made by Adams for motivating students to self actualize. They are recommendations which are thought provoking.

Agan, R. Don't talk to me about work. Agricultural Education Magazine, 1973, 45(7), 151+.

Agan proposes that elementary teachers fuse career education into their curriculum. He proposes ten aspects of a career education program that should

be taken into consideration when planning an elementary level career awareness curriculum.

Auld, J.S. Career of the week. Personnel and Guidance Journal, 1970, 48(10), 853-4.

This article discusses the career education program of a high school. Each week a different field was highlighted. Materials used were films, a bookcase of information, a bulletin board, and a tape library of representatives of different fields. It was felt by those involved that some degree of success was attained.

Aylor, K.E. Peephole into the world of work: Vocational information program. American Education, 1971, 7(2), 29-30.

Cleveland's Kennard Junior High School launched a program of Vocational guidance for inner-city boys in 1966. The program, called VIP (Vocational Information Program) was initiated by a retired Cleveland industrialist "to acquaint young blacks in Cleveland's inner-city with basic vocations that require skill and training, but not a college degree." It includes films, guest lecturers, field trips and student placement for after school, holidays and summer on-the-job training in jobs matched to student vocational interests.

Battelle Columbus Laboratories. Developing, revising and updating curriculum to meet on-the-job needs; Study. American Vocational Journal, 1972, 47(11), 89-98.

The following steps in curriculum development, revision and updating were proposed by the Battelle Columbus Laboratories: (1) Decide on curriculum organization and select program offerings based on employment opportunities, student body desires and needs, resources and constraints. (2) Assess employer and job requirements. (3) Formulate performance objectives for programs, and select/develop measures of attainment of objectives. (4) Assess characteristics of target populations. (5) Design programs. (6) Implement and conduct programs. (7) Conduct follow-up of graduates.

Baugh, D.S. "AMEGO": Accountable management for effective guidance operations (a model for organizing the work of counselors to facilitate accountability . . .). Fort Wayne, Indiana: Fort Wayne Community Schools, 1971. (ED 058 588)
EDRS Price MF-$0.65 HC-$3.29

A model for an accountable guidance program, this plan presents realistic performance goals for the practicing counselor, for school administrators, for parents, and for teachers. As their contribution to accomplishing the school's goals for its students, the counselors accept several very general responsibilities: (1) to provide every student with prescribed opportunities; (2) to provide every parent with certain pre-determined services; (3) to provide every teacher with certain guidance consultative services; and (4) to provide the administration with accountable feedback. The bulk of the plan, however, is comprised of specific behavioral objectives for all the parties involved--counselors, students, parents, teachers, and administrators. Exemplary forms of the records appropriate to the objectives are also included. (RIE)

Related Reference:

Baugh, D.S. and Martin, W.E. Total career capability for all. A career-development program model. Fort Wayne, Indiana: Fort Wayne Community Schools, 1970. (ED 044 719)
EDRS Price MF-$0.50 HC-$3.30

Bauman, M.K. Foundations for vocational choice in grades 1-9. Education of the Visually Handicapped, 1971, 3(2), 40-5.

This article deals with a study conducted to determine what is being done in the way of career education for prevocational blind children. Among activities listed by those responding to letters were: field trips, social studies classes, worker-speakers, a Career Day, occupations courses, part-time employment, individual counseling, and referral to the state rehabilitation agency. "Responses from 28 residential schools, and to a lesser extent, from 10 day schools, seem to reflect vast variations in prevocational programs for visually handicapped children."

Bennett, J.G., Jr. Developing positive perceptions about the world of work. Business Education World, 1971, 52(1), 13-31.

This article suggests a program of vocational education as early as the primary grades with an accurate orientation to the worth of all work and expanding with a gradual, long-haul exposure to occupations.

Bishop, J. Middle school creates an employment service: Arcadia, Florida. Clearing House, 1972, 47(3), 182-4.

An eighth grade employment service based in the school guidance department is described. Fifty students (of 125 requestees) were selected to participate in this service by faculty members who based their selections on "the student's merits of manners, integrity, desire, courtesy, attitude toward school work, etc." The author describes the project as a success in terms of employee evaluation, earnings and educational benefit.

Blezek, A. Helping students choose a career. Agricultural Education Magazine, 1971, 43(8), 193.

More than 500 job opportunities are available in agriculture, requiring various degrees of training. Agriculture teacher, student, and guidance counselor should work together to help the student explore possibilities with the final decision left to the student, says Blezek.

Blume, G.T. and Niederfrank, E.J. Virginia youth explore careers. Extension Service Review, 1971, 42(5), 14-5.

The 4-H Career Exploration Program has proven very successful in introducing Virginia youth to career opportunities available to them.

Bridging the gap, an independent case study. New York: American Telephone and Telegraph Co.; Institute for Educational Development, 1970. (ED 050 266)
EDRS Price MF-$0.65 HC-$3.29

American Telephone and Telegraph instigated this program to help students discover how their schooling relates to assuming the responsibilities of citizenship, useful careers, earning power, and the possibilities of work that satisfies. The four interrelated objectives are to: (1) help students who are underachievers, (2) break down barriers and bridge the communications gap between students, counselors, teachers, businessmen, and public officials, (3) improve the educational process, and (4) arrange for the cooperation of many businesses and public organizations. Five programs are available to accomplish these objectives: (1) 4-week counselor-teacher summer workshops, (2) 1-day teacher workshops at local businesses, (3) six half-day workshops for students, (4) all-year-long company resource programs, and (5) evening parent workshops. Guidelines for implementation and suggestions for conducting workshops are provided. Materials used for establishing and evaluating workshops which have been conducted are included in the appendix. (RIE)

Buckingham, L. Placement--A real service to youth. Baltimore, Maryland: Baltimore City Public Schools, 1972. (ED 066 682) EDRS Price MF-$0.65 HC-$3.29

A description of the beginning, growth, and present status of the highly successful placement service of the Baltimore City Public Schools, an extension of guidance service, was given. A broad spectrum of activities of the placement service will range through earn-learn programs with special emphasis on the "general" student; the co-involvement of business and industry for workshops, Project GO, the successful cooperative arrangement with the Job Bank of the Maryland State Department of Employment Security and the Department of Social Services; the operation of employment centers in schools; and specialized job development in order to point out the interlock of the various education programs and implications for career education. The information gained concerning occupational opportunities, labor conditions, educational qualifications and worker characteristics are valuable in counseling youth, establishing stronger links between education and the employment world, and in revising curriculum to meet the needs of all youth. (RIE)

Budke, W.E. and Woodin, R.J. New approaches to occupational exploration in the middle school. Journal of the American Association of Teacher Educators in Agriculture, 1971, 13(3), 1-16.

This article explains the importance of occupational exploration in the middle school, identifies the features of current programs of occupational exploration, and offers 13 guidelines for initiating and implementing programs of occupational exploration.

Bushnell, D.S. Applications of technology in vocational education. Educational Technology, 1971, 11(3), 9-10.

The primary purpose of this article is to describe some of the more recent developments benefiting vocational education. Six areas of application of instructional technology to the needs of vocational education are--matching employment opportunities and programs, vocational teacher preparation, administrative and organizational applications, individualized instruction, simulation and trouble shooting and continuing education.

Cannon, J. People in the job teach career awareness. Phi Delta Kappan, 1973, 54(4), 190.

At Bowling Green people from all kinds of occupations talked to classes. Parents were used as resources for speakers. Career awareness goal seems to benefit all involved.

Career centered curriculum workshop handbook. New Albany, Mississippi: New Albany City Schools, 1971. (ED 073 296) EDRS Price MF-$0.65 HC-$3.29

This handbook presents guidelines for sequential career development activities which were developed for a fused curriculum at a 2-day teacher workshop. Enumerating the educational responsibilities of the career coordinator and the instructor, this instructional outline correlates concepts to be taught, educational objectives, and suggested learning activities separately for the elementary, middle school,

and high school levels. Developed by a workshop director, an elementary coordinator, and a middle school coordinator, these workshop materials include annotated resource lists, workshop goals and objectives, and a rationale for career education. (RIE)

Career choice and career preparation. Olympia, Washington: Washington State Coordinating Council for Occupational Education, 1972. (ED 066 587)
EDRS Price MF-$0.65 HC-$13.16

This innovative study guide provides individualized occupational guidance for students in the secondary grades by means of autoinstructional reading materials covering career choice and career preparation. The student is asked to answer certain questions which narrow down his interests and qualifications, and on the basis of the answers he is instructed to turn to specific pages in the document. Jobs available to the high school graduate and dropout are described, including salaries, employment requirements, job locations, employment outlook, and sources of further information. Photographs illustrate the text, developed by a university educator and a training commander in the Air Force. Apprenticeship programs and federal employment programs are briefly discussed. Descriptions of community colleges and post-secondary vocational schools in Washington State include a chart alphabetically keying the institutes to specific vocational preparation programs which are offered. A map of school locations in Washington State is included. (RIE)

Career development resource guide, K-5. Clarksville, Maryland: Howard County Board of Education, n.d. (ED 064 494)
EDRS Price MF-$0.65 HC-$3.29

Developed by a supervisor of guidance and testing and a supervisor of vocational education and industrial arts with the aid of elementary teachers, counselors, and consultants, this resource guide for Grades K-5 contains ideas and activities for implementing a program of occupational awareness into the existing elementary school curriculum. The materials in the guide are intended to help children develop: (1) a positive and realistic self concept, (2) knowledge of

the world of work, (3) wholesome work attitudes, and (4) using leisure time profitably. For each of these major concept areas, generalizations are listed, and activities and ideas are suggested for each grade level. A variety of techniques are suggested for accomplishing the concepts, including role playing, field trips, class discussions, films and filmstrips, and individual projects. Two sample unit plans containing rationales, objectives, teaching strategies, and evaluation suggestions are provided for developing wholesome work attitudes and knowledge of the world of work for using leisure time profitably. Sample crossword puzzles, a word maze, other student materials, and a bibliography of teacher and student references are included. (RIE)

Related Reference:

Career development resource guide, grades 6-8. It's time to plan. Clarksville, Maryland: Howard County Board of Education, 1971. (ED 064 493)
EDRS Price MF-$0.65 HC-$6.58

Career education model. Sheboygan, Wisconsin: Career Education Center, n.d. (ED 073 251)
EDRS Price MF-$0.65 HC-$3.29

This Career Education Model graphically describes and identifies six major components useful in planning, organizing, and implementing career education programs: (1) career planning and preparation, emphasizing decision-making, (2) community input, (3) curriculum development by means of total staff involvement, (4) job placement, (5) self-concept, and (6) world of work, providing occupational awareness experiences. These developmental concepts, useful from pre-school through adult educational levels, include a sampling of integrated project activities, listed with their chief component. District-wide commitment and responsible leadership are necessary to implement any career education model. (RIE)

Career education in Syracuse. Todays Education, 1973, 62(2), 24-7.

Acquainting public school elementary and high school students with the world of work is the goal of the Guided Occupational Orientation Program in Syracuse,

New York. The city has no separate vocational school. Occupational programs have been decentralized where possible. Some of the main features of this experimental program highlighted in the article are--the career center, the classroom, the skill trainer, the field trip, work experience, junior high resource kits, Program for the Advancement of Career Education, and occupational learning centers.

Career guidance through groups. A job placement and group vocational guidance program for high school youth. Phase II July 1, 1969 through August 15, 1970. Houston, Texas: Vocational Guidance Service, 1970. (ED 050 362)
EDRS Price MF-$0.65 HC-$3.29

The first two operational years of the Houston area Vocational Guidance Service's Group Guidance Program for minority high school youth who live in economically disadvantaged urban areas is described. The program is experimental and is designed to prepare youth to make a positive transition from high school to suitable employment or post high school training. Objectives include: (1) exposing students to national and local labor market information and manpower trends; (2) helping students learn and implement techniques for employment and career planning; and (3) facilitating job-seeking techniques. Complete program activities are described for both years. First year results indicate that participants were more aggressive in the labor force, were better equipped to enter the labor force and earned higher wages. A second year evaluative summary points to success in respect to knowledge and motivational effects on participants, staff adequacy, program-school relationships, and program relevance to the target population. Plans for the third year are discussed. (RIE)

Childers, R.D. Microfilm occupational information system: Appalachia VIEW system. Audiovisual Instruction, 1970, 15(4), 59-61.

The San Diego County (California) VIEW (Vocational Information for Education and Work) system, in which occupational information is presented on a microfilm aperture card, is the model for the VIEW program described in this article. The author describes the

objectives of the Appalachia VIEW system as: (1) to prepare and disseminate current occupational information to high school students; (2) to provide teachers with an aid to help them relate subject matter content to the world of work; (3) to provide guidance counselors with data and expert assistance in gathering and disseminating data. This article describes the process of data gathering, VIEW card production and dissemination to the three-state subscribers to the system.

Cook, D.E. Vocational subject mix and on-the-job training curriculum. American Vocational Journal, 1970, 45(3), 64+.

Providing for students with no post-high school vocational plans is the topic. Service areas which provide great opportunities for programs of "occupational mix" were developed at Edwin O. Smith School, Connecticut. All students gained basic business knowledge and specific competence in several service-job areas.

Cooperative work experience coordinators' manual. Salem, Oregon: Oregon State Board of Education, 1972. (ED 068 678)
EDRS Price MF-$0.65 HC-$3.29

This manual has been prepared by the Cooperative Work Experience Specialist of the Instructional Services Division of Oregon, with the help of other work experience coordinators, to serve as a guide for teachers, coordinators, counselors, and community leaders who are responsible for establishing secondary and post-secondary cooperative work experience education programs. This booklet outlines factors to consider for implementing a program, planning procedures, responsibilities of the participants (school staff, employers, student trainees, parents), and the minimum criteria needed to qualify for state reimbursement. Much of the material in this manual is derived from the California State Department of Education "Handbook on Work Experience Education." This document is 3-hole punched for easy insertion into a ring binder. A wide range of resource materials is included. (RIE)

Cross, W.C. Career guidance program for small rural high schools. Vocational Guidance Quarterly, 1970, 19(2), 146-50.

The Career Selection Agent Program was initiated in New Mexico by the State Director of Small Schools Project, with the cooperation of the College of Education and the Department of Educational Psychology at New Mexico State University. Graduate students served as Career Selection Agents in the two small rural high schools involved.

Davidson, G.T., Jr. One approach to career development. Agricultural Education Magazine, 1972, 45(3), 57-66.

This article describes a course offered to students, faculty, counselors, administrators, and employees, which is designed to generate thinking regarding student use of occupational information in making career decisions.

DeBlassie, R.R. Occupational information in the junior high school curriculum. Journal of Secondary Education, 1970, 45(10), 269-74.

According to DeBlassie, junior high should be a time for career exploration and making decisions dealing with the general curricula to pursue in high school; career information activities provide students the opportunity to try out self concepts; and students should be made aware of the relationship between academics and occupations.

Demain, C. and DuBato, G.S. CC-LSD: Career conference-let students do it. Vocational Guidance Quarterly, 1970, 19(2), 141-4.

Students at Roslyn High School, New York, took charge of their career conference. An ad hoc committee of 25 volunteers was formed. The committee developed a list of occupations and career fields in which they thought the students would be interested. "The procedure used for conducting the career conferences held at Roslyn High School is basically the same as that employed by counselors everywhere." The success of the career conferences committee was greater than anyone expected.

De Zutter, P. Career center: New start to college or job. American Education, 1973, 9(2), 19-23.

This article deals with the career training program operated by Penn Valley Community College and located in Kansas City, Missouri. It is a conglomerate of skill training programs offered without cost to people who need them.

Dodson, A.G. Occupational exploration program for inner city elementary pupils. Vocational Guidance Quarterly, 1971, 20(4), 58-61.

This article deals with the occupational program at John Marshall Elementary School, one of the inner city schools of Norfolk, Virginia. The school has an all black enrollment in K-7. Each month a program is presented to the students. It consists of three parts: (1) a 10-minute broadcast presented over the public address system; (2) a luncheon for invited occupational speakers; and (3) informal talks by speakers to classes. Students assist in the choice of speakers.

Dorr, E.L. and Golden, R.E. Action in Arizona. Thrust for Education Leadership, 1972, 1(5), 26-29.

State legislation initiating career education in Arizona and its results in 13 separate programs throughout the state are described.

Doverspike, J.E. STAR system. Akron University, Ohio, 1971 (ED 056 357)
EDRS Price MF-$0.65 HC-$3.29

The STAR System is a developmental guidance approach to be used with elementary school children in the 5th or 6th grades. Two basic purposes underlie STAR: to increase learning potential and to enhance personal growth and development. STAR refers to 4 basic skills: sensory, thinking, adapting, and revising. Major components of the 4 skills are: (1) Sensing--observation and listening; (2) Thinking--goal setting, planning, weighing and choosing; (3) Adapting--try out,

examination and judgment; and (4) Revising--readapting and comparing. Elements related to the use of STAR which are now under study include: group size, co-leadership, age level, materials and methods to be used and number of sessions required. (RIE)

Ehrle, R.A. Vocational maturity, vocational evaluation, and occupational information. Vocational Guidance Quarterly, 1970, 19(1), 41-45.

This paper presents a model for the simultaneous presentation of occupational information to aid the student and participation of business and industry in the educative process to aid in other longer-term business objectives. This close cooperation would include a variety of verbal vocational experiences for perceptualization, directed experiential learning for conceptualization, and actual experience for generalization purposes. Vocational educators and vocational guidance workers would provide general supervision starting in the elementary grades. Gaming and simulation techniques build up a backlog of synthetic experiences in decision-making for the student as an aid in developing his level of vocational maturity. Employers would presumably benefit by (a) having an opportunity to participate directly in the educative process, and (b) being given an opportunity to prescreen or evaluate potential employees over a longer time span.

Elliot, I. Occupational orientation means work for you. Grade Teacher, 1971, 88(8), 60-64+.

Occupational orientation at the elementary level is based on the premise that children must be introduced to the world of work while they are still in elementary school. Postponing occupational orientation until a child is in secondary school--or worse, not teaching occupational orientation at all--can put the child at a distinct disadvantage. One of the most successful projects to acquaint elementary school students with the world of work is the "Room to Grow" program in Philadelphia. There are four basic ingredients: Classroom discussions and activities about jobs and careers; classroom visits by resource persons from industry, business and the upper schools; field trips

to work scenes; and student-created projects. This program supplies the teacher with an already organized curricula and service and materials. Another beneficial experimental program is Technology for Children. One problem is that many inner city parents see these programs as ways of channeling their children into blue collar jobs.

Engelhardt, D.F. Potential for occupational education or career development programs in two school systems. Purdy Station, New York: Engelhardt and Engelhardt, Inc., 1971. (ED 063 486)
EDRS Price MF-$0.65 HC-$3.29

This document contains excerpts from two larger studies illustrating how two communities have approached problems of bias and neglect in the occupational education area. The first series of excerpts come from a curriculum study conducted in an affluent suburb where a high motivation for college preparatory work exists but not for occupational programs. Findings from the curriculum study are provided for the areas of: (1) occupational education, (2) industrial arts, (3) home economics, and (4) business education. The second series of excerpts come from an appendix of a school consolidation survey conducted in a rural area where transition from traditional vocational agricultural programs to more "modern" courses was being contemplated. Results relating to the need for vocational education, philosophy, educational facilities, recommended courses, and implementation strategies are discussed. (RIE)

An evaluation of career guidance films. Culver City Unified School District, California, 1971. (ED 066 673)
EDRS Price MF-$0.65 HC-$3.29

The primary goal of this project was to motivate and assist school staffs in planning and implementing effective vocational guidance programs. A second goal was to determine in what ways and under what conditions the vocational guidance series, "Careers in the 70's," contributes positively to vocational guidance programs. High schools in four California districts were selected to participate in this project. A random sample of students from four schools served as subjects. The findings strongly support the value of including the "Careers in the 70's" film series as

part of a vocational guidance program. In the four schools included in the project, the films positively affected students' attitudes toward work and motivated them to seek additional information and to make career choices. The films also exposed them to many new jobs and encouraged them to explore other jobs available. However, it was not possible to generalize to programs that would merely show the films without their being an integral part of a planned program. (RIE)

Evans, J.L. Moberly's K-12 career development program. School and Community, 1972, 58(8), 11.

A program approved under the provisions of part D of the Vocational Education Amendments of 1968 enabled the Moberly school district to inaugurate a career development program in grades K-12. The major emphasis was on the elementary level as this area had done little in the past on an organized career effort. Committees determined curriculum guides for each level. Teachers were not required to teach career education but most did. This program is based on exposing elementary students to a wide variety of jobs.

An exemplary cooperative in elementary school guidance for small school districts. Final evaluation report. Monroe School District 103, Washington, 1969. (ED 048 605)
EDRS Price MF-$0.65 HC-$3.29

This project was designed to provide a new, comprehensive, and sophisticated guidance program to meet the needs of pupils and teachers in nine school districts. The major purpose of the program was to maximize the development of each child, and broadly stated its functions included the following: (1) in-service activities to extend and enrich teachers' understanding of areas such as changing goals and behavior and diagnostic cues, (2) counseling with groups and individuals, (3) working with parents of problem children, (4) arranging for referrals to other community agencies when necessary, (5) evaluating the program, and (6) disseminating information concerning the program. The common philosophical core that undergirds the entire counseling program was that the role of the elementary counselor was that of a facilitator of the learning process; consequently, the central role of the teacher was constantly kept in mind. In order to assess the effects

of the program, a descriptive model was utilized. At the conclusion of the program, after federal funds were no longer available, only two of the participating districts dropped elementary school counseling. The research reported herein was funded under Title III of the Elementary and Secondary Education Act. (RIE)

Fedele, G.M. Occupational information in the pre-kindergarten. Elementary School Guidance and Counseling, 1970, 5(2), 153.

Report by teacher who takes her pre-kindergarten students to view people working on different jobs. She says students have gained insight and respect for occupations of different people.

Feldman, M.J. Zeroing-in on a program of zero projects. School Shop, 1969, 29(8), 86-90+. Also in Todays Education, 1969, 58(6), 47-48.

"No student should be allowed to fail; student potential must not go unrealized. Schools must be held accountable by students, parents, and society for the achievement of this goal," according to the author. "A relatively new comprehensive system might provide a better educational program for more students of diverse ability." Renewal can emerge out of vocational education. What happens to student after classroom should be considered." This article presents a sample elementary through college educational program with a suggested community-run back-up system.

Fredenburg, P.B. Occupational orientation in agricultural careers: A must for career planning in 7th and 8th grades. Agricultural Education Magazine, 1973, 45(8), 175+.

The author sees the need for occupational orientation to agricultural careers in the 7th and 8th grades. He proposes the accomplishment of this by means of 40 instructional hours in modular form. "The modular concept would involve a free standing unit based on the job title. This would break down into 20 instructional hours for each year, which would

allow for scheduling 5 or 6 other occupational orientation areas during one school year."

Gambino, T.W. Junior high: The exploratory years. American Vocational Journal, 1972, 47(3), 56-7.

The author surveys the state of career education in New Jersey, including career clubs, summer programs, intensive skill training, and describes the Career Resource Centers, which coordinate the activities of the various career education programs.

Gambino, T. The world of work: Vocational awareness of elementary school children. Focus on the Future, 1970 APGA Convention Abstracts, March 1970, p. 225.

A model which identifies broad concepts for the teacher-counselor to utilize in developing an occupational awareness program is described.

Gantt, W.N. Occupational preparation in the elementary school. Educational Leadership, 1971, 28(4), 359-363.

"The strategies used by the elementary school to provide opportunities for needed experiences at the elementary level may have a significant impact upon the pool of unemployed, underemployed, or dissatisfied workers," says Gantt. "A major objective of elementary education is to discover the talents of each child and demonstrate their relationship to the world of work." Plans for achieving this objective are then reviewed and recommendations are listed.

Greene, W.L. Career education: A report from the job developer/analyst. Hagerstown, Maryland: Washington County Board of Education, 1972. (ED 073 304)
EDRS Price MF-$0.65 HC-$3.29

The purpose of this report is to provide the Washington County School System in Maryland with current information on the local labor market. Intended to aid work-study coordinators, teachers, and administra-

tors in providing information for students on occupational guidance and career exploration, this resource guide includes pertinent data on local industries, noting manpower needs and possible links between school and industry. Employment trends and projections are discussed extensively, and job opportunities are listed, together with starting salaries and educational requirements. As a member of a local Career Education Project, the author has worked closely with retail, manufacturing, and business personnel to collect labor market information, to promote openings for students in work-study programs, to place graduates, and to explain the career education concept. (RIE)

A guide for occupational orientation--"The world of work." Grades 5-7. Austin, Texas: Pharr-San Juan-Alamo Independent School District, Texas Education Agency, 1971. (ED 063 473) EDRS Price MF-$0.65 HC-$6.58

Prepared by staff and consultant coordinators of a pilot project from the contributions of 27 elementary and junior high school teachers, this curriculum guide is designed to orient students in Grades 5-7 to the world of work by stimulating interest in planning a career or vocation. The materials are divided by grade level into two sections, with Grades 5 and 6 concentrating on career awareness through the exploration of 26 different occupations and Grade 7 concentrating on such career development topics as self awareness, educational awareness, employment-seeking skills, and other types of occupational information. The following instructional components are provided for each occupation and career development topic: (1) general and behavioral objectives, (2) learning experiences, which consist of such activities as student skits in which students role play workers, individual activities, and group discussions stimulated by resource persons, films, or other instructional aids, and (3) a listing of instructional materials and resources. A bibliography of films, filmstrips, resource persons, field trips, magazines, and books is included. (RIE)

Hamilton, J.A. and Bergland, B.W. Strategy for creating peer social models. Vocational Guidance Quarterly, 1972, 20(4), 271-8.

This article describes a research-based procedure for selecting and training peer models, and for presenting them effectively to adolescent students. A series of videotaped peer social models were developed and tested at Stanford University with the cooperation of three separate 11th grade classes. The development, utilization and evaluation of these videotapes are discussed. The authors conclude that "peer social models are a promising resource for stimulating career exploratory behaviors among adolescents who previously have sought little or no information about possible educational and vocational goals."

A handbook of cooperative programs for Oklahoma vocational and technical education. Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education, 1972. (ED 069 917)
EDRS Price MF-$0.65 HC-$3.29

This revised handbook describes Oklahoma's cooperative programs for the secondary grades in vocational education, including the following topics: (1) purposes of vocational education, (2) the six types of cooperative programs in Oklahoma, (3) the role of teacher-coordinator, (4) the advisory committee's role, (5) regulations, (6) training stations, (7) selection of students, (8) student evaluation, (9) youth organizations for cooperative education students, (10) coordination of programs, and (11) legal considerations. Sample program materials are appended. (RIE)

Health careers in Kentucky guide. Curriculum guide for the allied health programs offered in Kentucky to assist counselors, teachers and people interested in career opportunities in health. Louisville, Kentucky: Health Careers in Kentucky, 1971. (ED 072 305)
EDRS Price MF-$0.65 HC-$9.87

Intended to provide information on career opportunities in health occupations for guidance counselors, teachers, and students, this tabbed directory lists occupational information alphabetically by job title for a wide range of health

careers. Kentucky Educational requirements, licensure or registration requirements, and resource addresses precede extensive data on admissions, program costs, and student financial aid for post-secondary institutions offering courses leading to these health careers. Presented in a 3-ring notebook for ease in insertion and removal of pages, this resource guide includes a list of vocational interests correlated to health careers, a resource list, and a description of financial assistance available for those pursuing health careers. This document was developed by a Kentucky hospital research foundation in cooperation with allied health and public organizations in the state for the purpose of increasing manpower in health services delivery. (RIE)

Henry, A.L. Teacher's role in career guidance. Agricultural Education Magazine, 1973, 45(8), 185+.

A vocational agriculture teacher's guidance responsibilities in the future look even more important than they do today. With the many job opportunities available in agriculture and its related fields the agricultural teacher will be called upon to try to find someone to fill the vacancies. If the teacher does not provide the guidance necessary or does not begin the guidance responsibility early enough, agriculture and all of its related fields will suffer. A few ways are suggested for discharging these guidance responsibilities.

Hildebrandt, R. Let video tape help you explore career concepts. Industrial Arts and Vocational Education, 1972, 61(5), 27-8+.

Exploratory activities using video taping fall into three categories--outside presentations, prepared presentations, and field trip supplements. Suggestions are given for the recording of each type of presentation.

Hoerner, J.L. Instructional systems for vocational education. School Shop, 1973, 32(5), 27-8.

Increasing emphasis on individualized instruction and performance-based learning is challenging vocational educators to take a deeper, closer look at instructional systems as a working tool in organizing curriculums. A description of the types of systems available precedes an explanation of how to use instructional systems and the need for vocational teachers to learn to create their own instructional systems, integrating the seven interacting components of a system: objectives, learner, teacher, content, resources, teacher-learner methods and evaluation.

Holden, H.D. Career education: An approach. Man/Society/Technology, 1972, 31(7), 220-1.

This article describes an exemplary project in career education in South Carolina.

Home economics occupations. An exploratory unit. Salem, Oregon: Oregon State Board of Education, Division of Community Colleges and Career Education, 1971. (ED 065 674)
EDRS Price MF-$0.65 HC-$3.29

Resulting from a series of workshops for local teachers held in April 1968, this resource unit provides guidelines for teachers who plan to explore the world of work in their programs. Developed for use in Grades 7-10, the unit outlines the teaching of six major concepts: (1) World of Work, (2) Self Concept of Work, (3) Personal Grooming and Health, (4) Requirements for Working, (5) Dual Role of Women, and (6) Home Economics Oriented Occupations. Also included are educational goals and concepts, learning experiences, and generalizations. Appended are a working vocabulary for the unit and sample student reaction forms. (RIE)

Hooks, V.L. Guidelines for an orientation and exploration career education program in middle school/junior high. 1972. (ED 073 318)
EDRS Price MF-$0.65 HC-$3.29

This publication has been compiled to provide educators with information, ideas, examples, and guidelines for establishing or implementing an orientation and exploratory career education program at the middle or junior high school level. Sections of the manual include: (1) a definition of career education and its role, (2) a discussion of the rationale for an orientation and exploratory program and listing of students' needs which should be met by such a program, (3) identification of the essential elements of a career education program and suggestions for implementing a program, (4) a discussion of the importance of behavioral objectives and how to write them, (5) use of community resources, (6) suggested curriculum for learning activities for a career education program, and (7) a bibliography of publications, programs, and materials concerning career education. (RIE)

Hoppock, R. How to conduct an occupational group conference with an alumnus. Vocational Guidance Quarterly, 1970, 18(4), 311-312.

According to Hoppock, your resource person for an occupational conference should have graduated or dropped out of your school or college, terminated his full-time education within the past five years, be now employed in the occupation that your students want to know more about, and have been in his present job at least one month. The "Questions for Group Conferences with Employed Alumni" which appears at the end of this article may be used as a guide for questioning by the class.

Hoppock, R. The use and misuse of occupational information. New York: New York University, 1970. (ED 037 749)
EDRS Price MF-$0.25 HC-$1.10

This paper is concerned with the uses and misuses of occupational information. Several points are made concerning misuses: (1) The Occupational Outlook Handbook needs to be read and interpreted rather than just handed out; (2) too much material is outdated; (3) many materials are biased and need to be replaced; (4) counselors should read all material before passing it out; (5) career conference days need revision so

students can attend more meetings; (6) use alumni and students for current job information; (7) the two-week unit on occupations taught by a disinterested person is a great source of misinformation; and (8) a course in occupations taught by a counselor can be made very worthwhile. Some activities which can achieve positive results are to: (1) make an annual follow-up study of dropouts and graduates to evaluate previous guidance, and (2) arrange plant tours where alumni work. An outline of a minimum program of occupational information for a high school or college is included. (RIE)

Horner, J.T. and Others. Common competencies: A broad-based occupational curriculum. Business Education Forum, 1970, 25(1), 60-62.

Vocational education programs, in order to better prepare a person for employment, should be based to a large extent on what a person will be doing on the job and what he needs to know. When planning education programs, it is impractical to develop a different program for each of the thousands of job titles. If, however, people employed in a variety of jobs require similar competencies, courses of study can be planned accordingly. An attempt was made in Nebraska to inventory occupations and analyze the knowledge and skills needed by a sample of employed persons. The results of this study indicate that persons employed in several different occupations need and use similar knowledge and skills. Attention should then be given to teaching the commonalities necessary for job performance.

Houston vocational guidance project. American Vocational Journal, 1972, 47(4), 54-7.

A high school Manpower program which places strong emphasis upon vocational guidance is described in this article. A Job Placement and Vocational Group Guidance Program for High School youth is the name of the program adopted by 16 Houston high schools. This program which was developed within the Houston school system centered on the counseling function and developed a strong counselor-training program as well as a detailed operations manual for counselor

training and curriculum and resource development. The program was aimed specifically at those students who seemed to fall outside both the academic and vocational tracks.

How much career education in science? Discussion session at the NSTA 1972 area convention in San Diego. Science Teacher, 1973, 40(4), 28-30.

Presented in this article are the composite ideas relating career education to science that were discussed at the NSTA 1972 Area Convention in San Diego, California. The teaching of science and career education are seen as very compatible.

Hudson, C.J., Jr. Sight and sound in occupational information. Agricultural Education Magazine, 1971, 44(4), 103-104.

Through the use of 8 mm films and tape recorders it is possible to explore the jobs available in industry. Suggestions are given on how to accomplish the job from securing permission to film to varied uses of the film.

Introducing children to the world of work. Salem, Oregon: Oregon State Department of Education, n.d. (ED 052 377)
EDRS Price MF-$0.65 HC-$3.29

This annotated bibliography has been prepared for librarians, principals, teachers, and counselors interested in developing programs to assist elementary grade pupils to obtain knowledge concerning requirements and opportunities in the world of work. The list is comprised of nonfiction materials which, in part or in full, have pertinent information about specific or general careers. Listings are arranged according to the subject headings: (1) Community Government and Services, (2) Industry, (3) Transportation, (4) Communication, and (5) Federal Government and Services. All of the 101 entries are listed alphabetically under subheadings in each major heading. An alphabetical list of publishers with addresses is included for the convenience of those wishing to order titles listed. (RIE)

Ireland, V.M. and Lauchner, J. Luckie street elementary school, 1970-71. Research and development report, volume 5, number 36. Atlanta, Georgia: Atlanta Public Schools, 1972. (ED 066 535) EDRS Price MF-$0.65 HC-$3.29

The goal for the instructional program at Luckie Street Elementary School was to improve instruction in all subject areas at all grade levels. However, reading was identified as the subject area which would be emphasized in grades one through seven, with special help for grades one through three, through the Comprehensive Instructional Program. The special or supplementary programs were aimed at enriching and/or strengthening the regular instructional program. The goals or objectives of some of the programs are as follows: (1) Reading programs: the overall objective was that pupils gain at the rate of one grade level per year; (2) Volunteers for Reading: the goal was to assist teachers with the instruction of reading; (3) Tech Brother Programs: the goal of this program, involving 24 Georgia Tech Students working with 24 pupils on a one-to-one basis, was to provide the pupil with a model male image while engaging in remedial tutorial and enrichment activities; and (4) Program for Education and Career Exploration: the overall goal was to provide pupils with experiences and information that will serve to help them formulate a basis upon which appropriate educational and occupational choices can be made at future major decision points. (RIE)

Jackson, J.S., Jr. and Others. Evaluation of the career development laboratory, Sayre Junior High School. Philadelphia School District, Pennsylvania, Office of Research and Evaluation, 1969. (ED 035 942) EDRS Price MF-$0.25 HC-$2.65

The Career Development Laboratory is a program of vocational orientation for junior high school students which was conducted at Sayre Junior High School, Philadelphia. To determine the program's success three instruments were administered: a Career Plan Survey showing students' present career plans and their present knowledge about the career, a Career Information Survey indicating students' information about careers in the six major career areas covered by this program, and a Semantic Differential to determine the program's effect on students' attitudes toward certain careers. Findings indicated: (1)

no increase in knowledge of careers in which students were interested, (2) a significant increase in knowledge about certain aspects of the six major career areas, and (3) no significant attitude changes. Recommendations were made to place greater emphasis on concrete activities in planning by the staff. Also recommended was a reevaluation of the time spent in various activities in terms of program priorities and further evaluation of the program when its offerings have stabilized. (RIE)

Jacobson, T.J. Career guidance centers. Personnel and Guidance Journal, 1972, 50(7), 599-604.

A new concept designed to increase the availability of guidance services to students has been initiated at four high schools in San Diego County. Each center brings together all the career guidance functions of the school in one location. Services available through the centers include job placement and vocational planning, scholarship information, vocational counseling, general information, and contacts with representatives from post-high school educational institutions. Its biggest asset is its availability to students. Suggestions are made for opening a Career Guidance Center.

Jepsen, D.A. Impact of videotaped occupational field trips on occupational knowledge. Vocational Guidance Quarterly, 1972, 21(1), 54-62.

The study reported in this article had the challenge of selecting effective techniques for broadening the occupational knowledge of rural youth. Its purpose was to compare the impact of two occupational information methods presented in school settings on rural ninth graders' knowledge of the world of work. A traditional method emphasizing the distribution and discussion of printed information is compared with an experimental method where the printed materials are supplemented by videotaped occupational field trips.

Johnson, R.H. and Myrick, R.D. MOLD: A new approach to career decision-making. Vocational Guidance Quarterly, 1972, 21(1), 48-52.

Making of Life Decisions (MOLD) is a simulation designed by the senior author to be used with middle-school-age students. Using a simulation of local schools and job markets, it motivates students by direct involvement and helps them learn a decision-making process.

Kimbrell, G. and Pilgeram, M. Work experience education: An answer to the question, who am I? Journal of Secondary Education, 1970, 45(5), 205-208.

"A primary function of education must be to provide meaningful, significant experiences designed to equip the individual for work in which he will be successful, and which will be properly challenging to him in accordance with his aptitudes, interests, and total personality." An important part of career guidance is work-experience education. Students learn faster and retain what they learn longer if they experience it rather than reading or being told about it.

Klaurens, M.K. Career development in business and distributive education. National Business Education Association Yearbook, 1970, (8), 76-82.

The development of appropriate career education curriculum for business and distributive education is discussed.

Koch, J.H. Applied systems approach to career exploration. Vocational Guidance Quarterly, 1972, 20(3), 299-32.

The applied systems approach to career exploration described here and partially operating at San Dieguito High School, Encinitas, California, is a process-oriented decision-making counseling paradigm. The San Dieguito System is a process as opposed to an ideological or theoretical construct. The system promotes an iterative process of analysis-synthesis which can be observed in many facets of decision-

making and problem solving. Emphasizing the psychosocial dimension, the student is guided into contacts with professionals, laymen, and parents in an effort to increase the frequency and quality of student guidance and counseling interactions.

Kokaska, C.J. and Others. Vocational preparation at the elementary level. Teaching Exceptional Children, 1970, 2(2), 63-66.

Focus of this vocational curriculum is elementary school. The goal is to present teachers at the primary and intermediate elementary levels with suggested vocational objectives and corresponding classroom activities which can be conducted with their students. Two general objectives are dignity of work and positive self-concept. Vocational training at elementary level can be instrumental in changing the quality of secondary vocational training.

Kosuth, J. and Miltenberger, J. Teaching for career decision-making. Tustin, California: Diversified Counseling Services, 1972. (ED 063 547)
EDRS Price MF-$0.65 HC-$6.58

This manual describes a program which attempts to meet the need for in-depth career counseling. Teaching for Career Decision-Making is a planned career development program consisting of logically organized, sequential learning activities specifically designed to familiarize a student with his own abilities, aptitudes, interests and values so that he may relate them to the educational and career choices available to him. The manual is divided into four sections. Section One describes possible ways to incorporate a careers class into the school curriculum. Section II outlines specific methods for organizing the class around the Career Instructional Packages. Section III contains the nine Career Instructional Packages. The final section provides a guide for implementing a Career Development Center. Included in the descriptions are a rationale for developing a center, a list of suggested activities, materials and equipment, and a floor plan layout. (RIE)

Kratochvil, D.W. and Others. Helping students to help themselves: Personal and social development program. School Counselor, 1970, 17(5), 376-383.

In the Personal and Social Development Program students can take leadership roles in the assessment, modification, and evaluation of their learning and social behaviors. Trained "counseling personnel" provide assistance at important decision points while students progress through a self-instructional process of behavior assessment and modification. The guidance system consists of developmentally oriented, prescriptive, and indirect intervention phases of guidance. The PSDP is an important part of the prescriptive phase of guidance that focuses on the delineation and correction of problems not necessarily experienced by all students. This program is designed to operate within an individualized educational context where computer-supported resources are available, and is an attempt to assist students in self-directed change of their learning and social behaviors.

Krausen, R.A. Of banks and student interest; Oakland's Dewey continuation high school. American Education, 1973, 9(2), 10-13.

This article deals with the Dewey Banking Cluster class in East Oakland's Dewey Continuation High School, Oakland, California. The stringent program in training of bank personnel has had very good results in placing its trainees in area banks.

Laramore, D. Career education concept filters down; Sonoma and Alameda counties. American Vocational Journal, 1972, 47(8), 45-47.

Sonoma and Alameda counties in California have joined in a career education program to train teachers in elementary, junior high, and secondary schools in career education and employ paraprofessionals as career education specialists. Copies of career activities in the classroom and slides used in other schools to give other teachers ideas are described. The model development has been used throughout California and part of Washington State and is reported very workable.

Laramore, D. Counselors make occupational information packages. Vocational Guidance Quarterly, 1971, 19(3), 220-224.

This article describes a method used at the University of Maryland in making occupational description audio-tapes and slides for use in Maryland schools. The students involved in this experience were teachers, counselors, or administrators in the state who had registered for an Introduction to Counseling course. At the end of the semester 100 different job descriptions with accompanying slides, audio-tapes, and written scripts were finished. These slide-tape packages were made available for Maryland students and counselors.

Laramore, D. and Thompson, J. Career experiences appropriate to elementary school grades. School Counselor, 1970, 17(4), 262-264.

This article discusses the problem of preparing relevant occupational information and a possible inexpensive solution to the problem. The University of Maryland has prepared a series of audio-slide packages accompanied by individual occupational descriptions and made them available to high schools, throughout the state. The purpose of the packages is "to give students a feel for what a job entails and to stimulate occupational exploration on their parts." One counselor involved in the project is presently training students to prepare the occupational audio-slide packages.

Lavender, J. Occupational versatility: Key to careers. Educational Leadership, 1972, 30(3), 215-217.

This article illustrates career guidance at the exploratory level by following "Jeff" through a typical day of shop class and illustrating how this leads to further career exploration.

Learning laboratories for unemployed, out-of-school youth--communication skills. Albany, New York: New York State Education Department, Bureau of Continuing Education Curriculum Development, 1972. (ED 063 478)
EDRS Price MF-$0.65 HC-$3.29

Prepared by an English instructor and a reading supervisor from ideas suggested by an advisory committee of teachers, this compilation of learning activities is designed for use by language arts teachers to supplement the curriculum resource handbook, "Learning Laboratories for Unemployed, Out-of-School Youth" (ED 047 273). The 19 activities, which are intended to orient the disadvantaged student to the world of work, emphasize such topics as nonverbal communication, writing skills, speech patterns, and completing job application forms. Each activity contains these components: (1) reference to the communication skills section of the curriculum resource handbook, (2) objective, (3) teaching procedure, (4) evaluation suggestions, and (5) student worksheets which may be duplicated and/or used for transparencies. An introductory section provides further suggestions for the teacher, including the recommendation that learning activities be organized in short, achievable units which can be gradually increased when the students' attention span, interest, and work habits improve. (RIE)

Related Reference:

Learning laboratories for unemployed, out-of-school youth--computation skills (with extensive consumer applications). Albany, New York: New York State Education Department, Bureau of Continuing Education Curriculum Development, 1972. (ED 063 479)
EDRS Price MF-$0.65 HC-$3.29

Link, A.D. The VIEW of Texas. Vocational Guidance Quarterly, 1970, 19(2), 134-139.

The State of Texas has piloted a modified VIEW program under the name, "Vital Information for Education and Work."

Lockwood, O. and Others. Four worlds: An approach to occupational guidance. Man/Society/Technology, 1970, 30(2), 56-58.

This non-traditional approach to vocational guidance used by a team of teachers instructing a vocational guidance course in a Lansing (Michigan) Junior high school was designed to "broaden students' understand-

ings of the world, rather than focus on specific career areas." Students were introduced to four worlds: the Natural, the Technological, the Aesthetic and the Human Worlds. Students discussed career areas related to each world, as well as the broader contexts of the four worlds.

Loomis, W.G. Vocational (career) education. American Education, 1971, 7(2), 3-5.

This article deals with the several obstacles faced by vocational education: the stigma of being "second best" in the educational community, the failure to relate academic and career goals, the "illogical and perplexing division between academic and vocational education," and availability and quality of vocational education personnel. The author elucidates a number of potential solutions, including: Leadership Development Awards, Cooperative Arrangements Programs, Utilization of federal vocational education legislation, etc.

Madlee, D. Careers from A to Zoo; K-12 program in Florida. American Education, 1973, 9(4), 15-21.

A vocational education program was set up at Wymore Vocational and Technical Center in Orange County, Florida. The program, which is oriented around 15 clusters, has been very successful.

Man: His life and work. A career orientation manual for teachers of seventh and eighth grade social studies. Cincinnati, Ohio: Cincinnati Public Schools, 1970. (ED 050 005)
EDRS Price MF-$0.65 HC-$6.58

Among the challenges facing the U.S. as it enters the 1970's has been one to public education to adapt its program to technological change and its social effects; this manual deals with a limited aspect of this problem. Seventh and eighth grade social studies instruction is the focal point of the effort, and career orientation is the theme by which adaptation will be approached whether a pupil is interested in pursuing a liberal arts, vocational, or technical

program. This project was started in the summer of 1969 as an interdisciplinary effort including art, English, home economics, industrial education, mathematics, science, and social studies. This approach contributes to the following specific goals: (1) provide meaningful career information in the context of specific subject matter instruction; (2) strengthen pupil interest in all subject areas; (3) provide a classroom atmosphere which would foster pupil motivation and encourage learning by discover; (4) encourage pupil investigations which would lead to greater self understanding; and (5) provide activities for pupil participation which simulate many roles in careers. This activity manual includes more than 100 career activities related to American history, urban living, Ohio history, and the social sciences. (RIE)

Mannebach, A.J. Career education in the elementary school. Agricultural Education Magazine, 1973, 45(7), 154-155.

This article centers around career education in the elementary school with emphasis on the student learning about self, social influences, and the world of work.

Massie, H.O. Vehicle for vocational information. Vocational Guidance Quarterly, 1972, 21(2), 149-150.

A traveling table-bulletin board is proposed as an effective tool for displaying vocational information before the students and the staff of a small junior-senior high school. When this method was used, there was a marked increase in student inquiries about careers and post-high school training.

Master plan for career education. Beaverton School District 48, Oregon, 1972. (ED 066 562)
EDRS Price MF-$0.65 HC-$6.58

Career education is a developmental process through which students discover their interests and talents, explore career opportunities, establish realistic and defensible career objectives, and develop a degree of

employability. This publication reports the efforts utilized by the Beaverton School District, Oregon, in developing a master plan for career education encompassing these goals. In addition to a review of development activities, the publication also contains guidelines for developing and maintaining programs at the elementary, intermediate, and high school levels and a three-phase evaluation model. The guidelines consist of a series of tasks grouped into the areas of: (1) curriculum, (2) evaluation, (3) facilities, (4) guidance, (5) in-service, (6) personnel, (7) policy, (8) public relations, (9) resources and materials, and (10) transportation. (RIE)

Mathis, H.F. and Mathis, L.R. Career information publications of professional societies and trade associations. Vocational Guidance Quarterly, 1971, 19(3), 211-214.

In two previous articles the authors have discussed publications using data compiled from the NVGA Bibliography of Current Occupational Literature, 1959 Revision and the 1963 Revision. Although the bibliographies are not complete and some classifications might be questioned, these Bibliographies and the Current Occupational Literature section of The Vocational Guidance Quarterly are certainly the best readily available sources of data on occupational literature. Occupational publications are listed by type and recommendation.

Mini-newspaper caters to career-minded readers. Nations Schools, 1973, 91(1), 68.

"Career Education News" is the name of a mini-newspaper initiated by the five-town, five-school district Franklin Northeast Supervisory Unit in Vermont. The paper, published by office practice students and teachers during its first year, is designed to keep teachers, administrators, students and taxpayers abreast of the latest developments in career education programming within participating schools.

Mitchell, E.F. and Others. A comprehensive orientation to the world of work through industrial arts and vocational education (grades 1-12). Greenwood Public Schools, Mississippi, 1970. (ED 049 361)
EDRS Price MF-$0.65

In response to the philosophy of vocational education outlined by the National Advisory Council, the Greenwood Public School Administration drew up this proposal for a new educational structure. Designed to prepare students for the world of work through a comprehensive orientation process involving practical arts, vocational education, and guidance, the program is justified by the cultural and economic deprivation and the high dropout rate in Greenwood schools. The purpose of the elementary industrial arts phase is to introduce pupils to the world of work. Grades 7-8 provide students with exploratory experiences and are prevocational in nature, and the high school offers a complete vocational education program. A comprehensive study of modern industry and occupational orientation is provided for in Grade 9, followed by mechanical drawing in Grade 10. Vocational part-time cooperative education and vocational counseling are integral parts of the program. It is recommended that as much of the program be put into effect each year as qualified staff, facilities, and finances will allow. A detailed course sequence is provided in the appendixes. (RIE)

Moskowitz, I. 3 R's + relevance = real cool summer school. School Shop, 1970, 30(2), 76-78.

A project combining the action and involvement of practical occupational training with the academic necessities of English and math has completed its third successful summer at Hackensack (New Jersey) High School. Four high school instructors (English, math, auto mechanics, and building trades) worked to help bring increased relevancy to the academic teaching material. Evaluation of the project indicated very positive results.

Murphy, M.K. Getting a jump on career choices. American Education, 1973, 9(5), 18-23.

> To see career development in operation, visit Susan Owens' carpeted, hexagonal room at Mountain View Elementary School, where reading spaces, work stations, and table and chair arrangement suggest the best of an "open" or "informal" classroom. Here second-graders are well into a six-week period during which subjects are keyed to careers relating to the restaurant business. Cobb County's career development program enriches the regular elementary school curriculum with six elements: "hands-on" activity (that is, providing concrete experiences that illustrate a particular job), tie-ins with all academic subjects, field trips, resource persons, role-playing, and occupational awareness. These elements are mixed into the program as creatively as the imaginations of teachers and students permit.

McDaniels, C. How to develop better career films. Vocational Guidance Quarterly, 1970, 19(1), 56-60.

> The potential to alleviate some of the current manpower shortages comes from those young people who are now in high school. Last year, some 2,693,000 young people graduated from high school. Since 1.5 million were not going on to college, they were looking for permanent careers. But did these young people know about the job opportunities that are available? From a variety of studies on career interests of youth, it is apparent that they did not. Youth need to get information on careers all during their school years. Career films need to be improved.

McKinlay, B. Occupational information access system: A model system of labor market information for use in counseling. Journal of Educational Data Processing, 1970, 7(5), 283-291.

> This article deals with the design of an occupational information access system that will enable the student to better utilize occupational information that is available. The system as designed and tested has five operational components: an informational referral generator to suggest occupations and to refer users to

substantive occupational information, and four "information files containing or providing access to different types of occupational information presented in different media.

Neel, E.O. Preparing students for employment. School Counselor, 1971, 18(4), 294-296.

An occupational workshop was conducted to help prepare students for employment upon their departure from high school. The objectives and the means for their accomplishment are discussed in this article. The following topics were covered by the workshop: choosing a job, locating a position, applying for a job, keeping the job and changing jobs.

Norwich, A.L. A career development program in the Chicago Public Schools. Elementary School Journal, 1971, 71(7), 391-399.

Children in grades four to six benefited from an innovative unit of instruction organized around workers and their jobs.

Oberlander, O.C. A study of occupational practices as they relate to curriculum design for career education. Mount Pleasant, Michigan: Central Michigan University, Department of Industrial Education and Technology, 1971. (ED 068 629) EDRS Price MF-$0.65 HC-$3.29

This study was conducted to: (1) identify existing practices of occupational guidance programs for Grades K-12 in Michigan, (2) recommend educational changes for the preparation of occupational guidance personnel, and (3) determine specific objectives and ways in which the Department of Industrial Education and Technology of Central Michigan University can prepare occupational guidance personnel. Data were gathered through mailed questionnaires as well as personal interviews and/or group conferences with 154 teachers, counselors, and administrators at elementary, secondary, postsecondary, and college levels. The responses to the 10 questions included in the interviews and on the questionnaires are sum-

marized. Some major conclusions of the study are: (1) In general, those responsible for career planning felt ill prepared and not qualified to provide occupational guidance services. (2) A large percentage of the present counseling and guidance services are too theoretical, with the major emphasis on psychological and sociological aspects of human development and little emphasis on career development. (3) One or more undergraduate course(s) directly related to career planning and development should be required for those involved in career education. (RIE)

Occupational resource manual for Hawaii. Honolulu, Hawaii: Hawaii University, n.d. (ED 068 689)
EDRS Price MF-$0.65 HC-$26.32

Developed cooperatively between the Occupational Informations and Guidance Services Center under the Community College System and the Department of Educational Psychology at the University of Hawaii, this occupational resource manual for Hawaii, bound in a 3-ring notebook, contains pertinent information for students, parents, counselors, and teachers on career opportunities, vocational education programs, job requirements, and job placement. For each of 15 occupational clusters, national and local employment opportunities, a general description, training and educational programs, and extensive job summaries correlated with the Dictionary of Occupational Titles are presented. Other resource materials include: (1) general job information, (2) Hawaii State Employment Service, (3) programs for the disadvantaged, (4) training program opportunities, (5) a discussion of the future as it may affect individual career plans, (6) acknowledgments to community leaders, and (7) a brief reference list. A bibliography, general index, and an index of programs for the disadvantaged are included, as well as a detailed description of the manual's development and instructions for the user. Sub-indexes are included for the job areas, which emphasize career opportunities available for those with up to 2 years of post-secondary training. (RIE)

Off-campus experiences now an approved course of study for high schoolers. Nation's Schools, 1972, 90(4), 58-60.

Describes an innovative program launched at Lincoln High School in Portland, Oregon, to forestall "dropping out" by longtime underachievers.

Olson, J.C. Decision making power: Sign of articulation. American Vocational Journal, 1971, 46(7), 32-35.

Cites the necessity of involving students in their own career decisions and shows how to accomplish articulation based on this philosophy. (RIE)

Pate, R.H., Jr. Placement and follow-up: What role in the guidance program? High School Journal, 1971, 54(4), 287-295.

In this article trends and issues, as well as current practices, related to the role of placement and follow-up in secondary school guidance programs are reviewed. The author comes to the conclusion that follow-up activities are necessary for the counselor to evaluate the success of his work and to modify it where necessary. He believes the outcomes of placement and follow-up are central to a successful guidance program.

Patterson, P.E. and Others. Films help career guidance program. Audiovisual Instruction, 1971, 16(5), 78-80.

A series of films were developed by the Orange County (California) Vocational Guidance Project as the nucleus of a "Careers in the '70's" vocational guidance system. "The object is to affect feelings and attitudes, with the films as decision-making tools--decision-making with logic," according to Project Consultant Anita Mitchell. The films have been combined with a programmed text entitled "Self Assessment and Appraisal Structure" and field tested in several Southern California schools with positive results.

Peacemaker, plumber, poet, drummer? Why children must explore the world of work and how you can help them. Instructor, 1972, 81(6), 45-56.

This special section on career education includes a number of articles dealing primarily with proven programming. An article by Robert Sylvester and Esther Matthews entitled "Four Big Questions Children Need to Ask and Ask and Ask" includes an explanation behind the four questions: "What am I like?"; "How am I changing?"; "What will I be like?" and "How will I affect others?" Another article, by Norman Gysbers and Earl Moore, called "Guiding Career Exploration, Any Teacher Can" outlines a few things teachers can do to develop career education programs in their schools. These suggestions mostly concern such outside class strategies as applying for outside funding, establishing committees, contacting resource personnel in the community, etc. The final series of articles describes exciting career education programs in New Jersey, Georgia, North Dakota, Maryland and Connecticut.

Pearlman, J.G. and Nathir, S. A pilot study to determine the effectiveness of guidance classes in developing self understanding in elementary school children. Final report. Deerfield, Illinois: Deerfield School District Number 110, 1969. (ED 039 608)
EDRS Price MF-$0.50 HC-$5.85

The set of materials includes five story units to be read by elementary school students and corresponding teacher guides designed to promote subsequent class discussion. Story units cover school matters, play activities, home life, peer relationships, and responsibility. The teacher guides contain lesson objectives, discussion questions, and summaries of each lesson designed to reinforce the guidance objectives initially set forth. This program is planned: (1) to create an awareness that a motive or goal is behind all behavior; and (2) to help children become more perceptive of their goals and the options available to reach those goals. (RIE)

Pearson, H.G. Career fields in industry for the high school graduate: Career fields guide. Vocational Guidance Quarterly, 1969, 18(2), 87-90.

This article describes a program developed by Polaroid Corporation entitled Career Fields Guide to acquaint Polaroid employees with the breadth of occupational activities available. The guide covers the company's 48 Career fields and expounds upon the potential latitude various career ladders afford to employees. The utilization and limitations of the manual are also described.

Peterson, M.L. A comparison and cost analysis of two approaches to the provision of occupational information. Ann Arbor, Michigan: University Microfilms, Inc., 1971. (ED 055 179)

To develop effective occupational information programs in secondary schools, professional educators need reliable information on the relative costs and effectiveness of alternative methods of collecting and disseminating occupational information. The primary purposes of this study were to compare the relative effectiveness of two approaches used to present occupational information, and to ascertain and compare the costs of materials, equipment, and other resources involved in the two approaches. Video and audio cassette tapes of sequences of occupational information comprised the treatments used with two groups of ninth grade students. Cost data were gathered from both test groups for purposes of a cost analysis. Data were analyzed for differences resulting from the treatment variables. A major finding was that students receiving occupational information using video tapes indicated more occupational preference changes than did those students using audio cassette presentations. Additional findings and conclusions are presented. (RIE)

A plan for career development in the public schools of the District of Columbia. Task force report on vocational education. Washington, D.C.: District of Columbia Board of Education, 1969. (ED 059 346)
EDRS Price MF-$0.65 HC-$3.29

To design a plan for implementing recommendations for vocationally oriented programs at all educational levels, and specialized vocational training directed toward specific career objectives, an 18-member task force reviewed recommendations from several studies, conferred with vocational education specialists and school administrators, and conducted a public opinion survey among students, teachers, and the community. Major task force recommendations were: (1) Design a sequential pattern of career development for all levels which is closely related to the world of work and continuing education institutions, (2) Institute a 5-year plan of curriculum and staff development for implementing the career development program, and (3) Secure funds and initiate planning for constructing a career development center. Conceptual schemes are provided for career foundations at the elementary level, the career cluster concept, career survey at the junior high level, and career exploration and preparation at the senior high level. (RIE)

Pointer, L.J. (ed.) The world of work. A curriculum guide for grades one through twelve. New Orleans, Louisiana: Educational Systems Development Corporation, n.d. (ED 059 368)
EDRS Price MF-$0.65 HC-$3.29

Developed by a committee of principals, counselors, and teachers as part of the local World of Work program, this curriculum guide is designed to aid in providing occupational information and career decision-making skills for grades K-12. Major purposes of the guide are to: (1) provide occupational information that is both educational and vocational, (2) give the student experiences and training in decision-making, (3) develop in the student a healthy self-concept, and (4) utilize community resources to enhance the student's knowledge of careers. Detailed curriculum outlines are suggested for elementary grades (kindergarten, lower and upper primary), secondary grades (grades 7-11), and 12th grade. Several questionnaires, data gathering methods, sample parent interview forms, an attitude survey, and self rating evaluation charts are appended. Resource materials for all grade levels are listed. (RIE)

Project people of Peoria: Career awareness and exploration. Peoria, Illinois: Peoria School District 150, 1972. (ED 068 684)
EDRS Price MF-$0.65 HC-$6.58

This booklet was written by teachers for teachers, to help them implement career education in the classroom. Sample units were prepared by participants in a career education workshop held in June 1972, and additional material was adapted from career education literature recommended by teachers. Emphasis in the project was on people and what they do--refocusing curriculum around people and their occupations. The key element in curriculum development was always the teacher. Elements described in this Peoria career awareness and exploration project include goals, responsibilities, communication, interviews, career visits, and unit plans. (RIE)

Project Scarlett: A demonstration middle school career exploration project. Ann Arbor, Michigan: Ann Arbor Public Schools, 1972. (ED 072 011)
EDRS Price MF-$0.65 HC-$3.29

The narrative portion of this report described the middle school career exploration curriculum now in effect for grades 6, 7, and 8 at Scarlett Junior High School, Ann Arbor, Michigan. The major goal of the project was to establish, in a student oriented environment, a balanced learning program to increase student affective and cognitive growth. This growth would then facilitate a transition into a career preparatory curriculum at the high school level. The teaching methodology, as exemplified by the sixth grade model schedule in the report, moved from a departmentalized to an integrated interdisciplinary team teaching approach. The particular cognitive, affective, and psychomotor objectives were listed along with a description of the project's administration. The three classes involved had a combined enrollment of 305; 30% of the expected enrollment. All participating teachers were volunteers. The report provided evaluation objectives, the proposed budget, schedules for the classes and teachers involved, and a statement made by the Ann Arbor Public Schools verifying the legality of the project. (RIE)

Reynolds, J.O. Dayton gangs up on career orientation; interdisciplinary junior-high-school program. School Shop, 1970, 30(1), 45-47+.

The City of Dayton recently capitalized on assistance from the Ohio Vocational Education Department to implement a career-orientation program for junior-high schools. The "hands-on" technique was followed. Principals, counselors, and teachers agreed that it was a more effective method than has previously been used.

Rasof, E. Detroit combines students' worlds. American Education, 1971, 7(5), 24-27.

The Detroit Public Schools' Work Adjustment Programs are training a number of occupationally, educationally and socially maladjusted youths to acquire employment and deal effectively with employment opportunities. Youths from school programs, halfway houses, dropouts and various other assorted cases of maladjustment are counseled, educated and trained for employment opportunities in the Detroit area. Several cases are discussed.

Rice, R.C. Pioneering a program for disoriented youth. School Shop, 1970, 29(8), 120-123.

A Cleveland pilot program was begun at Thomas A. Edison Occupational School to help "neglected" students. Its aims were to have students realize the importance of an education and to re-enter a conventional program at a comprehensive high school. Objectives set for students--develop saleable skill for job entry; acquire wholesome attitude toward school, community, and work; realize the importance of staying in school through related subject matter, develop self-confidence necessary to take advantage of student employment opportunities, develop desirable social skills.

Risher, C.G. Confused about career education and how to approach it? How it can work in a power program. Industrial Education, 1973, 62(5), 26-27.

"All career education projects have one central theme," according to the author. That being: "to assist students to be aware of relevance of in-school courses to out-of-school, on-the-job work." The article attempts to define career education for the industrial arts teacher and describe modes of classroom implementation.

Rose, K.H. Workable occupations unit. School Counselor, 1970, 17(4), 267-268.

In 1969, 9th grade social studies classes at Beaver River Central School undertook a two-week vocational study with good results. Traditional methods were used but a team approach in planning and executing the unit proved extremely workable. The team consisted of social studies teacher, junior high counselor, and guidance paraprofessional aide. It proved more effective than one teacher or counselor carrying out all aspects of the unit.

Sain, T.L., Jr. Job interviews in the classroom. Business Education Forum, 1972, 26(8), 51-52.

This article gives the business teacher some idea of how to organize a job information program. Included in the program is a mock interview of the student conducted by the teacher.

Samson, G., Jr. Enriching their early-age store of occupational information. School Shop, 1971, 30(6), 60-61.

The initiation of an occupational information class and the accelerated utilization of occupational information by the guidance department helped point up the serious lack of information previously available to students and generate interest in improving guidance functions, according to the author, a junior high school industrial arts instructor. He describes an occupational information program which helped students develop new career insights.

Shepard, D.W. Orientation to careers in agriculture. Agricultural Education Magazine, 1970, 43(4), 84.

This article contains a description of the agricultural career orientation program at Williamsburg Community Schools, Williamsburg, Iowa.

Shertzer, B. Teachers' guide to group vocational guidance. Cambridge, Massachusetts: Bellman Publishing Company, 1971. (ED 068 695)

This guide presents a sample program in vocational guidance which may be included as a unit in a subject matter course such as English or social studies, a homeroom program, or as a separate course. Specifically, this program is predicated upon having one classroom meeting a week during which either inexperienced or experienced teachers or counselors help 10th or 11th grade students to become familiar with the world of work and develop tentative occupational plans based on realization of how abilities, interests, and personality may be utilized in the work world. The guide consists of three units covering: (1) The World of Work, (2) Knowing Yourself, and (3) Securing a Job and Progressing in It. The lesson plans for each unit contain objectives, motivational techniques, recommended student assignments, and suggested teacher and student resources. Several sample teaching materials are appended. (RIE)

Sinick, D. and Others. Research on the teaching of occupations: 1965-1970. Vocational Guidance Quarterly, 1971, 20(2), 129-137.

This article describes research reported in doctoral dissertations, master's theses and other professional literature during the calendar years 1965 through 1970, together with two 1964 reports not previously reviewed. Of the 44 studies, 77 percent are experiments. Ten studies report practices or opinions related to the teaching of occupational information. A comprehensive listing of references is included.

Smith, E.D. Vocational aspects of elementary school guidance programs: Objectives and activities. Vocational Guidance Quarterly, 1970, 18(4), 273-279.

The author's mandates to vocational guidance programs in the elementary grades are to provide experiences by which youngsters can: (1) expand their knowledge concerning the magnitude of the occupational world; (2) appreciate the various broadly defined dimensions of work; (3) systematically diminish their distortion about various occupations; (4) at the generalizable level, understand those factors present in our society which cause change, and in turn directly affect work and workers; (5) identify, understand, and interpret the significance of interests, capacities and values as dominant factors in the career process; (6) establish meaningful relationship between education and future occupational endeavors; and (7) acquire more effective decision-making skills.

Social service aide project. Summary reports and proposals. Chicago, Illinois: YMCA of Metropolitan Chicago, Career Options Research and Development (CORD), 1970. (ED 059 393)
EDRS Price MF-$0.65 HC-$3.29

The Social Service Aide Project for the training and education of paraprofessionals is a part of the Career Options Research and Development Project of the Young Men's Christian Association of Chicago. These materials include: (1) "A Report of Pilot A Social Service Aide Program: Phase I and II (September 1969-August 1970)," (2) "Pilot D: Human Services Career Development Program (High School Education and Training)," part of the Phase I' Final Report, and (3) "Phase III Proposal of Social Service Aide Project for the Training and Education of Paraprofessionals (October 1970-September 1971)." (RIE)

Stamps, B.J. Career education, big D style; Skyline Center. American Vocational Journal, 1972, 47(3), 42-44.

Dallas' Skyline Center, a massive ($21.5 million) Vocational education facility is described by its deputy assistant superintendent. The facility, financed almost exclusively by a local bond issue, covers 14 acres and is the result of studies and planning by teachers, administrators, industrial

representatives and state educational consultants. It houses an airplane hangar, a complete color television studio, a computer center which serves as terminal for 17 Dallas high schools, a 1,600 square foot greenhouse and more than 20 other areas designated for specific vocational instruction.

Stanton, W.A. Middle school years and career development. Clearinghouse, 1970, 44(9), 531-533.

This article is a philosophical argument for the efficacy of career education. The author cites the works of several noted authorities in the field, such as Donald Super, quotes labor statistics and educational figures and points to new methodologies and technologies which could enhance career oriented programming.

Stephens, T.N. and Clary, J.R. Governor got busy: Middle grade students in North Carolina. American Vocational Journal, 1972, 47(3), 52-55.

Thousands of middle grade students in North Carolina are exploring the world of work through a state-funded program that will help them appraise their career potentials at an early age. This article describes the initiation of a $3 million dollar project initiated by Governor Robert W. Scott to encourage career exploration at the middle grade level. The pilot programs have achieved notable success and spawned further funding in North Carolina.

Stewart, C. and Kissinger, J. Schools use television to focus on job opportunities. Audiovisual Instruction, 1970, 15(4), 59-61.

Matching high school graduates with available jobs in Northeastern Wisconsin is the objective of an occupational guidance series developed by the Department of Public Instruction in Madison. The series utilizes television tapes aimed at junior-high school students. Tapes portray occupational opportunities in and around Northern Wisconsin. They are "designed to fill the need for specific information for students who are

not going to college," according to the author. Tapes are aired over commercial television stations throughout the geographical area.

Sturges, J.C. Assisting vocational development through a unit in civics: A comparison of two techniques. New Orleans, Louisiana: Educational Systems Development Corporation, 1969. (ED 036 945)
EDRS Price MF-$0.25 HC-$2.35

An experimental classroom instruction program in vocational information was conducted as a six-weeks civics unit in 12 selected secondary schools in New Orleans. Field trips, career days, and viewing specifically constructed television programs were the experimental activities, while the control treatment consisted of the textbook approach to providing vocational information. The results were examined in an attempt to determine the effectiveness of the two treatments. They indicated that neither method was superior in helping the student learn the textbook material, modifying his attitude toward work, self and education and effecting his sillingness to seek out or become involved with vocational information. However, open-ended responses showed that the experimental activities were relatively more appealing to students. (RIE)

Sullivan, J.A. and Wood, T. Exploring careers with guidance and industrial arts. Industrial Education, 1973, 62(4), 32-34.

The "Career Plan Process" represents the culmination of a career education curriculum development project for industrial related careers. This cluster project was one of five sponsored by the Illinois Division of Vocational and Technical Education for career exploration at grades 9-10. The article describes the model developed (the "Career Plan Process") and field tested by this project.

Thompson, C.L. and Parker, J.L. Fifth graders view the work world scene. Elementary School Guidance and Counseling, 1971, 5(4), 281-288.

This study demonstrated that fifth grade students can learn about the world of work and relate it to their own environment. An occupational unit based on specific learning objectives was developed and evaluated as a learning experience for fifth-grade students. The treatment group, as hypothesized, scored significantly higher than the matched control group in a post-test designed by the authors.

Thoresen, C.E. and Others. Behavioral school counseling: A demonstration of the Stanford career planning project. Washington, D.C.: American Personnel and Guidance Association, 1969. (ED 031 721)
EDRS Price MF-$0.25 HC-$1.50

The Stanford Career Planning Project designed and tested the effectiveness of three competing experimental treatments for promoting career exploration in adolescents. They were: (1) group structured stimulus materials, (2) group social modeling, and (3) a combination of the two. Planned stimulus materials were prepared and used in four group counseling sessions with eight subjects per counseling group. Four video-presented group social models were developed and used in four sessions paralleling the content of the structured stimulus materials. The sequence as well as content of these first two treatments were followed in the third treatment. A variety of learning activities and suggested counselor comments are included in the report to help achieve the following behavioral objectives: (1) given a small group of between four and eight high school students, it will be possible to identify student verbal responses demonstrating career information-seeking behaviors; (2) given the same type of group, it will be possible to use four types of verbal and nonverbal reinforcers immediately after students' verbal demonstrations of above-indicated behaviors; (3) it will be possible to use at least one method for determining how effective the group counseling program actually was. (RIE)

Tonkin, W.J. Vocational guidance through videotaping and television. 1967. (ED 036 047)
EDRS Price MF-$0.25 HC-$0.40

The research study described here was designed to provide vocational guidance through student involvement in the videotaping of live occupational situations and the later showing in the classroom. A major goal of the program was to identify the factors involved in student dropout situations. (RIE)

Ury, C.M. Project R-3, San Jose, California. Audiovisual Instruction, 1970, 15(4), 45-46.

Student readiness, subject relevance and learning reinforcement: these are the three R's of San Jose's Project R-3, "a program to treat the learning problems experienced by eighth and ninth grade students from predominantly disadvantaged economic backgrounds." The program, a joint effort of the San Jose Unified School District and Lockheed Missiles and Space Company, produced "a curriculum incorporating occupational skills analysis to make relevant the acquisition of reading and math skills . . ."

Venn, G. Thirteen ways to improve your occupational program. Nations Schools, 1971, 88(12), 41-43.

The author lists and explains 13 ways the superintendent can improve vocational education: "(1) Exhibit strong leadership. (2) Get the support of principals. (3) Select a good director of career education. (4) Have a job placement office. (5) Develop work-experience and work-study programs. (6) Expand flexible cooperative education plans with industry. (7) Expand occupational orientation in the middle grades and junior high school. (8) Provide career information in the elementary grades. (9) Establish advisory councils. (10) Redirect counseling. (11) Develop youth volunteer experiences. (12) Expand time use of present facilities and equipment. (13) Check the budget for program integrity."

Vocational exploration for city youth. Science Teacher, 1969, 36(12), 30-31.

Princeton University and Mercer Community College have been carrying out a program of summer jobs to acquaint black urban youth with career opportunities in technical

areas. A two-year grant from the Alfred P. Sloan Foundation is underwriting the project, which involves 22 Princeton and Trenton high school youths. The students work at Princeton University two or three summers. When they graduate from high school, they may enter Mercer County Community College and receive further technical training and specialized guidance.

Vocational guidance models, a review. Albany, New York: New York State Education Department, 1969. (ED 038 533)
EDRS Price MF-$0.25 HC-$2.75

The five projects presented in this report illustrate different approaches to vocational guidance. An occupational survey of St. Lawrence County was undertaken to determine the curriculum needs of the vocational centers. Secondary objectives were to determine employment needs and opportunities and to provide improved occupational information, placement, and public relations, (2) The establishment of District Vocational Guidance Centers provided a broad-based model program of information and guidance services, (3) While enrolled in an in-service course which integrated career information and counseling techniques, counselors developed a curriculum guide designed to help students make a smooth transition from school to work and to develop a realistic understanding of their role in life, (4) The Rochester Career Guidance Project developed an electronic counseling system to enable students to learn how to make effective plans and decisions, (5) A model vocational guidance program featured group guidance sessions for occupations and careers in grades 7 and 9, and job placement with supportive counseling in grades 11 and 12. A followup study is included for graduates of two area vocational centers, classes of 1963-1966. (RIE)

Volunteers in college and career information (VICCI). San Francisco, California: San Francisco Unified School District, 1971. (ED 064 634)
EDRS Price MF-$0.65 HC-$3.29

The Volunteers in College and Career Information (VICCI) is an innovative attempt to improve guidance services within San Francisco High Schools. To insure that the volunteers receive proper training and supervision, the program was placed under the direction of

a credentialed counselor or project director. Three major results have been demonstrated by the project: (1) that it is possible to train and use volunteers to provide a variety of pupil personnel services; (2) that the service is desired and used by students and staff and is a success in its first year of operation; and (3) that flexibility is necessary to operate and that this is what VICCI lacks in school district operation. It is intended that VICCI be primarily an informal, "drop-in" service to students. This consists of basic college and career information, special research or extra help in exceptional situations, and a readily available "listening ear." (RIE)

Wasil, R.A. Whatever happened to Harry? Job placement service for dropouts; Akron-Summit County job placement department. American Vocational Journal, 1972, 47(11), 70+.

This article touches on the services provided by the Akron-Summit County Job Placement Department. Using federal government criteria placement specialists identified those youth who are disadvantaged and could be helped by the program. The aim of the program is to find jobs for these youths.

Weaver, A.M. Social studies: A good place to start. American Vocational Journal, 1969, 44(12), 24-25.

Social studies in the upper elementary grades and junior high school offer excellent opportunities to introduce students to the world of work. At this level students can discuss vocations without many of the prejudiced attitudes, such as class consciousness or concern for status, acquired later. The author describes a career unit for civics which involves individual exploration of a chosen occupation and in-class reporting on that occupation.

Where the action is: Oregon: Clustering. Nations Schools, 1971, 88(12), 44-45.

The Oregon State Department of Education's cluster concept for occupational training is both a curriculum innovation and a facility-planning breakthrough. The

theory behind the cluster is that 97% of the approximately 25,000 existing occupational titles can be grouped into a few major areas according to similar characteristics and purposes. A school can feasibly gather closely related occupations into a "cluster" that is at once a physical facility and a curriculum concept. Several advantages accompany the cluster method.

Where the action is: Toledo: Counseling. Nations Schools, 1971, 88(12), 48.

At Toledo's Jefferson Center a year-round vocational rehabilitation facility places as much priority on counseling and evaluation as it does on actual skill training. The center's target population includes 15-20 year old youths who have dropped out of school. The center makes an effort to work with the specific problems which are causing failure and frustration. Jefferson relies on counseling and testing to find the right career for each student.

Wiggins, J.D. Career counseling: Is anybody listening? Does anyone really want to hear? School Counselor, 1972, 20(1), 65-66.

A few of the problems involved in vocational counseling are explored, including the societal problems associated with counseling and placing poor or minority students, the effective utilization of measures of interest, maturity and vocational preference and the mistaken notions of counselors commonly held by students, teachers and parents.

Wilson, N. and Esposito, J. The development and implementation of an integrated career-centered curriculum for elementary grades one through six. Final report, fiscal year 1971-72. Newport, Kentucky: Newport Independent School District, 1972. (ED 067 446) EDRS Price MF-$0.65 HC-$3.29

The objectives described in this report were to develop and implement an elementary school curriculum to meet students' needs and an in-service training program to show the teachers how to teach career development to the students. The six elementary

schools in the Newport Independent School District are in a high poverty area with all of the problems of the socially, economically, and culturally disadvantaged. The academic-centered elementary curriculum in use was not relevant to the children's needs nor did it help them to relate to the world of work. To overcome these deficiencies, instructional units for each grade were written, media and materials purchased, field trips made, community resource persons consulted, and in-service workshops held. Achievement and intelligence pretests and posttests administered to the students showed a definite improvement in scores as a result of the new curriculum. The most significant gain was in the area of grades, a random sampling showing that 47 percent of students sampled improved at least one letter grade or more. Although parent involvement in the program was poor, school personnel and the community demonstrated a positive attitude toward career education. The growth of career awareness for elementary students is believed to be a way of alleviating the present high drop-out rate in the high schools. (RIE)

Winn, C.S. Incremental learning for career exploration in distributive education. Business Education Forum, 1972, 27(3), 28-29.

Winn states his belief that career education in distributive occupations is essential to a vigorous and dynamic distributive education program for the future.

Witczak, L.A. and Ehlers, D. Project: Occupational orientation. School Counselor, 1970, 17(5), 362-3.

Project: Occupational Orientation was undertaken at Bladenburg and Central High Schools during the 1968-1969 school year in an attempt to help students better identify with the world of work while still in high school. An early introduction to the world of work was provided for 30 sophomores in each school as these students explored entry job opportunities and requirements in the metropolitan Washington area. The object was to show them job possibilities. Field trips were provided to area sites of employment. The students were enthusiastic about the program.

Wolansky, W.D. Oregon musters a statewide commitment to clusters. School Shop, 1970, 29(9), 33-35+.

Career Cluster Curriculum for high school students in Oregon is described. It is aimed at ways to integrate the occupational preparation of all individuals into a relevant total educational structure. The goal is to provide students with a core of skills common to a number of related occupations. A program for evaluation of the curriculum was also set up.

Wood, W. Cargo of career education. American Education, 1971, 7(3), 16-20.

A jobmobile which caters primarily to the disadvantaged school-age youths of Maryland's Eastern Shore is a classroom on wheels which: helps dropouts get back to school, gives slow learners a chance for better grades, and offers training in marketable skills to the jobless. Two 40-foot trailers are utilized by the Maryland State Department of Education in an attempt to upgrade vocational education opportunities.

Work experience career exploration program (WECEP) advisory committee report: Evaluation and recommendation. Minneapolis, Minnesota: Minneapolis Public Schools, Special School District 1, 1972. (ED 068 651)
EDRS Price MF-$0.65 HC-$3.29

The Work Experience Career Exploration Program (WECEP) is a prevocational exploratory program designed for educationally disadvantaged ninth grade students, emphasizing the cultivation of individual talents, development of social skills, and the recognition of the student as an individual with social and economic worth. In order to evaluate WECEP, a post-test only control group design was followed. Based on data collected from school records, interviews with students, and employer ratings, the major findings of the evaluation was that the WECEP students showed significant improvement in behaviors and attitudes such as cooperation, completion of tasks, and pride in work. Included in this report are recommendations and program cost data. (RIE)

World of work. First year report, 1971-1972. Mount Pleasant Public Schools, Michigan, 1972. (ED 065 671)

Prepared during the first year of a 3-year pilot program, this working draft of a resource guide represents efforts to develop and field test resource units for career education, Grades 1-6. The units, which include objectives and learning activities, are clustered as follows: (1) Distribution and Marketing, (2) Agriculture-Natural Resources, (3) Fine Arts and Humanities, (4) Communications and Media, (5) Construction, (6) Health, (7) Hospitality and Recreation, (8) Manufacturing, (9) Office and Business, (10) Transportation, (11) Environmental Control, (12) Public Service, and (13) Consumer and Homemaking. Also included are an integrated plan for the curriculum, a suggested plan for presenting the units to the various grades, and a sample unit outline. The material was written by a school principal and his in-school teachers, who worked to preserve the individuality of each unit plan so that each might serve as a springboard for other teachers. The more fully developed units contain bibliographies and evaluation guidelines.

World of work: Grade nine. Teacher's guide for the school year 1967-1968. Minneapolis, Minnesota: Minneapolis Public Schools, 1968. (ED 031 723)
EDRS Price MF-$0.25 HC-$1.90

This manual is designed to serve the classroom teacher as a guide to the accompanying televised series of programs on the world of work. The Television Series is designed to give a broad overview of many occupations, by bringing into the classroom more than fifty "guests" from all levels of preparation: the semi-skilled, the skilled, the technical, and the professional. The lessons employ familiar classroom techniques in bringing guidance information to the students, not from professional entertainers, but from people actually working in the community. The prime objectives of the series are: (1) to present information on occupation areas, job families, and related types of work possibilities; (2) to stimulate further investigation by the students into the world of work, and (3) to provide a basis for program planning for the senior high years. Lessons have been based upon the interest categories

found in the Kuder Preference Record, and are prepared by the Radio-Television Department of the Minneapolis Public Schools. (RIE)

Wykle, J. VOE: Laying the foundation for career education. Business Education World, 1972, 52(3), 28.

The purpose of career education is to prepare the young to accept the reality of having to discover constructive pathways to adulthood, to help them successfully negotiate those pathways, and to assist them in finding personal relevance in the life options available to them.

Yeck, D.F. Work as an organizing center for learning. Illinois Career Education Journal, 1972, 29(4), 26-27.

This article explains the development and implementation of a plan for teaching, using an occupation as the organizing center.

Youst, D.B. A comprehensive micro-image file for occupational information. Final report. Rochester, New York: Rochester City School District, 1970. (ED 047 335)
EDRS Price MF-$0.65 HC-$6.58

The report describes the activities which comprised the design, implementation and evaluation of a Micro-Image System for occupational information, which is one component of a comprehensive career guidance program. The location of the film equipment in the Frederick Douglass Junior High in Rochester, New York is discussed in terms of the amount of use it received by students. A data gathering phase, during which students using the equipment filled out a questionnaire, is elaborated in detail and the results presented. The rationale underlying the Rochester Career Guidance Project's development of the Micro-Image File is explained and actual steps in the development are enumerated. Appendices include: (1) further theoretical and practical career guidance considerations, (2) a description of a Career Guidance Laboratory where students participate in simulated work situations, and (3) actual career guidance materials focused on the work of X-ray technologists. (RIE)

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